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The purpose of this journal is to present an authentic picture of the domestic financial system in Hungary, to show the major features of operating the public sector and the national economy – as reflected by the principal financial interactions –, the efforts aimed at convergence and at building a future, as well as presenting the related professional debates.

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Several articles in this issue were co-edited by Balázs Romhányi, principal economist of the Ministry of Finance.
When the re-elected government of PM Ferenc Gyurcsány announced its New Equilibrium Programme, immediately after its creation in June 2006, many felt doubt about it, both among professionals and others.

This Programme is fairly ambitious in terms of fiscal consolidation and public sector reforms, particularly to ensure a long-term sustainable path of economic growth, convergence and to prevent the decade-long practice of cyclical disequilibrium from returning.

Doubts are much understandable, mainly if we look back to the past 16 years or to an even longer period of time. It is not new that with elections coming up the government in office is less susceptible to equilibrium criteria. Instead, they are prone to serve a comfort feeling of the voters.

We have worked on the implementation of the programme for a year or so. The views tend to change during such a long time in many respects. Today you cannot hear voices of whether the Government is serious enough about the fiscal consolidation. Results are convincing. Good progress was made in fiscal consolidation, and at the same time, reforms are about to come in healthcare, public administration (central government), education and pension system.

The ruling government did not hesitate to touch former taboos such as gas price subsidies, which had been rather expensive and socially unjust or the rules of drug subsidies, which had been unable to impede drug budget overruns. Also, the transformation of travelling and public transport subsidies is not to underestimate.

Government budget positions changed a lot from the previous years due to austerity measures. The measures are to make impacts in harmony with one another, resulting in a part of black and grey economy to be whitening, coupled with a better taxpayer morale and making tax avoidance or evasion much riskier in a period when the Government was forced to increase taxes to improve equilibrium including an increased tax burden for all.

Changes are sensible on both sides of the budget. Financial management in the public sector has become more severe and tightened. We could feel in the second six months of 2006, like in the first four months of 2007, that ministries and agencies were kept within the limits established. Significant overrun has not been seen. On the revenue-side, increasing amount of money come from taxes. Excise taxes have jumped due certainly to stricter and enhanced checking activity while contribution payments have been better as well. There is no worry about VAT and PIT receipts. As a result, monthly projections have been met from time to time for a year or so without any bad surprise.
Consequently, confidence is significantly growing towards the Hungarian economy. The key sign of the favourable sentiments is a very strong Hungarian forint for more than six months. In Hungary, we also attach high importance to the signals and warnings received from the European Commission, the International Monetary Fund or OECD. These institutes all confirm that our efforts are efficient and we have started to go on the right path.

A year is, of course, not so long time. Our programme is accordingly laid out for several years. All the more so, because we have to make up for a lot of deficiencies or actions what the previous governments failed to implement over a decade or more. The postponement of the relevant decisions is also explained by the necessary but unpopular moves of such a programme. However, now is the time to act. The Gyurcsány Government made the relevant decisions and insisting on those. This consistency is reflected in the first results and positive feedback from experts who add, however, that the process must go on.

Next steps are the reforms in the public sector as included in the Convergence Programme with the modernisation of government budget system.

Public sector reform is expected to modernise the state including the elimination of stresses whereby keeping the balance that was disallowed in the recent years. Nevertheless, it is not satisfactory. We also need to establish a regulatory framework to warn of emerging concerns, new developments that are to threaten the equilibrium and preventing from inconsiderate decisions, which may well result in more indebtedness on a longer term. In a word, this framework could provide for the equilibrium to be kept for real in the activity of government and Parliament.

In this context, not only the governments of all times should be contained but also the Parliament had better ensure that these rules are set out in laws and enforced with long-term interests of Hungary kept in mind.

That is the way we have started but we are in the beginning thereof.

We are aware ever so long of needing fiscal rules. The mechanism of budget planning, preparations and financial management of the public sector should be reformed. We knew but only now is the time to implement it.

Therefore, the government budget for 2007 contains some built-in rules in the context. The Parliament approved two such rules at the time of adoption of the government budget for 2007.

In particular, the primary balance shall not be negative from 2008 on while the budget accounts shall have to show increasing surpluses from year to year as laid down in the law. This is necessary for the indebtedness not to grow in proportion to GDP but to be lower.

Another budget rule is bound for the ministries – budget chapters – not to spend automatically their allowances – established by the Parliament – but to make equilibrium reserves from a part thereof. The Government is, at regular intervals, to decide on the availability of the funds in reserve, based on evaluation of the ministries’ activity including their spending policy. This arrangement is in operation. The first evaluation was held in April 2007 following the quarter 1, and some 25 per cent of the funds in reserve were released for use in May.
However, more should be done because these do not result in an overall budget management reform.

Now we are preparing for a full-ranging new regulatory framework of public finances in co-operation with the State Audit Office and government experts in charge and with the significant knowledge basis of the wider professional community involved. We have changed the practice of law preparatory works. The new cooperation is expected to ensure that the proposals are considered more than a simple government plan but a document that reflects an opinion supported by a wider professional community.

The work underway is to cover almost all the sectors and fields of fiscal management set for reform.

The first draft legislation of public asset management was prepared in May so the Parliament can decide on it in the first six months of 2007. In the draft, the emphasis is on the management or utilization of public assets, rather than on privatisation. The fundamental phase of privatisation is over; the key privatisation transactions were finished. Accordingly, a new organisational structure will be established with updated operational rules.

Also, a first draft has been prepared of a status law applying to the operations of government agencies. The draft will probably be put forward to the Parliament in the second six months of 2007. Further consultations are needed to create a final form to be approved by the Government.

In addition, we have two bills under preparation.

One is about the responsibility for public finances, establishing the Parliament’s Budget Office. In the law, there are three fiscal policy rules in the framework of equilibrium security scheme the most important of which is to keep the level of real indebtedness on hold. That is, government debt shall not increase faster than headline inflation. To this end, the primary balance should be in line. With local governments being a part of the public sector, their indebtedness should statutorily be regulated. In the context, the rule would be to limit net borrowings in relation to the investment projects.

The draft law contains detailed budget procedural rules. Government budget has to be adopted year by year in the future as well while we know that certain budget allowances could well be worked out in broad lines years beforehand. Equilibrium-securing annual budgets shall be elaborated only if the relevant decisions consider the following years’ budget allowances. To this end, a mid-term government budget plan is prepared to set out the funding to budget chapters in a forward-looking approach to the following three years.

The law would forbid the Parliament to discuss any bill or amendment motion, which could increase the deficit in a year or next years failing which the most important rule of real indebtedness could not be met.

Finally, we plan to amend the public finance law expected to be streamlined due to the legislation mentioned above by adjusting and building in that in the new legislation structure.

Although the legislation changes are hoped to be prepared quickly enough, still in the year, their full impact will be felt only from the following year by the nature of the
new system. However, the change is significant even on a short run, partly because the
decision-makers’ approach or way of thinking will change as well and because more
and more elements of the ruling scheme will prevail each year. The built-in brakes will
retailor the room for manoeuvre of politicians as with elections coming up.

It is a question at the same time how to create consensus in the present political
field, allowing for the new rules to be adopted. The agreement on the fundamental
issue, that the country or the national economy shall not be exposed to the risk of
increasing indebtedness, is in place. There is no dispute over how important is to
secure equilibrium.

Hopefully, we could create a consensus of providing for the necessary Parliamentary
conditions required for the responsible management of public funds including the
rules to guarantee and enforce those.

I think it is important and useful for Pénzügyi Szemle (Public Finance Quarterly)
to take part, in its own way, in creating consensus by disclosing the efforts to update
the mechanism of public funds management in its thematic issue as well as the stud-
ies, prepared by authentic domestic and foreign authors, presenting the relevant pro-
fessional background.

János Veres
In many countries around the world, discretionary fiscal policymaking has been beset by both time inconsistency and common pool problems. In democratic societies, fiscal performance may reflect not only the economic cycle but also the political cycle, as a result of dynamic inconsistency. The common pool problem is prevalent especially where decentralized fiscal entities, including lower-level governments, engage in free-rider behavior neglecting its adverse impact on the general government balance. Similarly, interest groups may exhibit such behavior through their representatives within collegial or coalition governments.

As a consequence of time inconsistency and free-rider behavior, trends in public finances have been characterized by deficit bias, procyclicality, and structural distortions. Over time, these developments, often in combination with structural rigidities and demographic pressures, have given rise to problems of public debt sustainability. Moreover, they have contributed to poor macroeconomic performance, and in some cases, to financial crises.

Although untouched by a financial crisis, Hungary is no exception to these trends. Over the past decade and a half, the above problems have intensified, culminating last year in the largest government deficit (expressed in terms of GDP) in the European Union, and in a concomitant sharp rise in public sector indebtedness. Such fiscal profligacy has adverse macroeconomic consequences in the short run and is not sustainable over the long run.

Inspired by New Zealand’s Fiscal Responsibility Act of 1994, an increasing number of countries have adopted a rules-based fiscal responsibility framework (FRF) to tackle the problems mentioned above. FRF is a generic term that encompasses policy rules, procedural rules, transparency standards, and monitoring and enforcement mechanisms.1 Faced with a worrisome fiscal trend, Hungary can benefit from the experience of other countries in the design and implementation of such a framework.

This article begins with a discussion of major fiscal problems associated with discretion-based policies and their implications for macroeconomic performance. Next, it examines key features of the rules-based FRF introduced in selected countries. Although the experience with the framework has been rather
recent, the article seeks to derive a tentative assessment of its effects. To conclude, an attempt is made to draw lessons of possible relevance for Hungary.

FISCAL PROBLEMS

Since around the middle of the past century, many democratic societies have indulged in time-inconsistent fiscal policy. Typically, rhetorical commitment to fiscal discipline made by a government at the beginning of its mandate was abandoned in the run-up to the next election, as politicians felt compelled to step up expenditures or cut taxes to be reelected. This was reflected in a fiscal stance dominated largely by the electoral cycle, especially in emerging markets, including in some post-socialist economies.

By the same token, interest-group pressures bear irresistibly on every government, without regard to the overall budget constraint, creating a common-pool problem. This problem can be particularly acute in a decentralized fiscal system where lower-level governments pursue an expansionary fiscal stance without regard for its ultimate impact on the overall budgetary outcome. Implicitly, such free-rider behavior assumes that the central government and other lower-level governments will adopt a compensatory policy course, or that the central government will bail out subnational governments as they run into financial trouble. Extreme cases of such behavior could be observed through the nineties in Argentina, Brazil, and India.

Time inconsistency, often compounded by the common-pool problem, leads to deficit bias, to procyclicality, and to expenditure distortions. Instead of following the Keynesian prescription of a fiscal expansion (contraction) during economic downswings (upswings), essentially in a symmetric manner, many governments responded to economic fluctuations by restricting the operation of built-in fiscal stabilizers through discretionary action that amplified the destabilizing effect of these fluctuations. In fact, they allowed for tax cuts and/or boosted expenditure during good times, and reined in expenditures or introduced tax hikes in bad times.

Over time, many industrial economies sought to build a generous welfare state, not always matched with a rise in tax revenue, resulting in widening deficits. This trend, in turn, contributed to a buildup in public sector indebtedness relative to economic activity. Containment of the rising debt-GDP ratio proved difficult given the increasing share of mandatory expenditures on social entitlements, driven in part by aging demographic pressures. In some countries, notably Sweden, an untenable fiscal situation, along with weaknesses in the banking sector, led to a major financial crisis in the first half of the nineties.

In emerging market economies, especially in Latin America, procyclical fiscal policy was exacerbated by exposure to pronounced economic fluctuations – due to real shocks stemming from sharp changes in the terms of trade, reinforced by the ebb and flow in foreign investment. In this region as well, expenditure composition became increasingly distorted as economic booms encouraged the rise in social transfers and government payrolls. During recessions, fiscal adjustments were often front-loaded with sharp cuts in investment spending on infrastructure projects.

Instead of offsetting cyclical shocks and contributing to growth, discretionary fiscal policy actually contributed to macroeconomic volatility, to dampened growth, and even to financial crises. In general, fiscal vulnerability has been on the rise, thanks to the combination of debt sustainability problems (compounded in some cases by fiscal decentralization) and a fragile domestic banking system, in the context
of unprecedented external liberalization and a pegged exchange rate regime. Not surprisingly, during the nineties, a number of countries suffered debt crises, often in tandem with banking crises and currency crises. Although hitting primarily emerging markets in Latin America, Asia, and post-socialist Europe, such crises did not spare some advanced economies (Sweden).

FISCAL RESPONSIBILITY FRAMEWORK

Faced with these problems, an increasing number of advanced economies as well as emerging market economies have adopted a rules-based FRF. More immediately, introduction of the FRF was prompted by a looming financial crisis (Argentina), or by the experience of a recent crisis (Bulgaria, Sweden), in an environment of high capital mobility. In many countries, the FRF was implemented in tandem with a rules-based monetary policy regime, mostly in the form of inflation targeting, or in some instances, anchored by a hard exchange rate peg.

Formally, the FRF can be enshrined in various types of statutes (see Table 1): a constitutional provision or high-level legislation (Brazil), ordinary legislation (India), or an international treaty (European Union) that applies to all governments over successive electoral cycles. Alternatively, the framework may consist of a (in some cases implicit) policy guideline, or agreement among coalition partners, assumed by a given government and presumably – but not necessarily – binding on future governments (Bulgaria, Chile, Estonia, United Kingdom), or a combination of a legal statute and a policy guideline (Sweden). The statute may be very detailed (Brazil) specifying design features as well as every aspect of implementation. At the other end of the spectrum, it may define a broad outline (New Zealand, India), to be accompanied by regulations issued by the government in charge.

Typically, the FRF consists of a combination (though not necessarily in equal proportions) of policy rules, procedural rules, transparency standards, and a monitoring and enforcement mechanism. The following survey is limited to cases where a critical mass of these elements can be found, in the tradition of the New Zealand approach. Excluded, however, are policy rules of an earlier vintage which lack most other elements, especially transparency.10

Neither the legal format nor the degree of detail of the statute lends itself to generalization as best practice. In fact, the FRF must be tailored to country-specific circumstances, including legal precedents and cultural traditions. Compliance with an implicit policy guideline in some countries might be far stronger than with a constitutional clause in another country. Whereas in Latin American countries there is a preference to cast the FRF in an elaborate legislation, in Anglo-Saxon countries the framework is spelled out as an outline, with considerable emphasis placed on transparency. Effectiveness is determined by the credibility of the FRF, whatever its statutory form.11 Ideally, at an initial stage, the FRF should operate as an implicit policy guideline, and then later, it should be formalized but only after successful implementation during a learning period. This is perhaps best illustrated by Chile’s recent legislative enactment of the FRF, after applying and perfecting an informal rules-based framework over five years.

Policy rules

A fiscal policy rule consists of a permanent constraint on a broad performance indicator, usually expressed in terms of stock (public debt) or flow aggregates (government balance, borrowing, expenditures, or some component
thereof). Policy rules are also known as numerical rules often set in proportion of GDP. In a decentralized fiscal system, policy rules may need to be applied to subnational jurisdictions as well. Likewise, countries that belong to a cooperative arrangement, including a monetary union, may assume uniform rules applied to each member government.

In general, the stock of public sector liabilities (or net worth) is seen as a key summary indicator of a country’s vulnerability. Financial markets tend to assess default risk on the outstanding debt of the public sector as a whole, rather than just the central government, given the implicit guarantee provided by the central government on the liabilities of the rest of the public sector.12 More generally, to maintain or restore fiscal sustainability, a number of countries have introduced policy rules, first to reduce public debt, and then to stabilize it at a prudent ratio to GDP.13 In New Zealand and the United Kingdom, the government is required to set a medium-term target or ceiling for the debt ratio, as well as an adequate floor

<table>
<thead>
<tr>
<th>Country, Effective date</th>
<th>Policy rules</th>
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<th>Statute</th>
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</tr>
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<td>overall balance, stabilization fund</td>
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<td>Poland (1998)</td>
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<td>C</td>
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<tr>
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<td>MT current balance, debt limit</td>
<td>GG</td>
<td>P</td>
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<td>Nigeria (pending)</td>
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<td>NG, SG</td>
<td>L</td>
<td>E</td>
<td>J, F</td>
</tr>
</tbody>
</table>

1 All rules are applied on an annual basis, unless specified on a multiyear (MT) basis.
2 General government (GG), national (central, federal) government (NG) or subnational governments (SG).
3 Constitution (C), law (L), international treaty (T), or policy guideline or agreement (P).
4 Independent monitoring (M) or executive (E) authority.
5 Sanctions for noncompliance: reputational (R), judicial (J), or financial (F).
6 Although the SGP applies to all EU members, financial sanctions are in principle levied for noncompliance only in the euro area. Several euro members impose additional policy rules at the subnational level or as part of convergence programs.
7 Adopted by a number of subnational governments.
8 Enacted into law in 2006.
for public net worth. In addition, to avoid free-rider behavior, in Brazil, a target debt ratio is set at each level of government. For similar reason, in the European Union, member governments are obliged to reduce the gross debt ratio to 60 percent of GDP. Convergence to the debt ratio ceiling usually requires complying, either implicitly or explicitly (Brazil), with a minimum primary surplus as an operational target (see Appendix).

A more common rule is defined in reference to a comprehensive flow indicator of fiscal performance, such as the budget balance. There is wide variety of budget balance rules: maintenance of overall balance, current balance, primary balance, or non-oil balance. Alternatively, a numerical limit is set on the overall deficit (European Union, Peru, India) or a floor for the overall surplus (Chile, Sweden). The current balance rule, also called the ‘golden rule’ (Brazil, India, Venezuela), is commonly used to prevent crowding out much-needed public investment. The actual target or numerical limit (or floor) is specified by the circumstances of the given country, including the need for simplicity, transparency, and ease of technical implementation.

In some countries, the budget balance rule is accompanied by additional limits on total government expenditures (Bulgaria, Venezuela), primary outlays (Argentina, Ecuador, Peru, Sweden), interest payments (Colombia) and/or the wage bill (Brazil, Colombia) in order to contain the fastest growing components of fiscal imbalance and the ensuing distortions in the composition of the budget. Further, setting expenditure targets in line with potential GDP growth (Ecuador) can help support a neutral stance with respect to the cycle.

Similarly, to ensure cyclical neutrality, the budget balance rule can be defined in terms of structural or cyclically-adjusted balance (Chile, Sweden, United Kingdom) that allows for the operation of automatic stabilizers. A similar function is performed by a balanced budget requirement specified in a multiyear or medium-term context (New Zealand, Estonia, European Union) with scope not only for the operation of automatic stabilizers, but also for active countercyclical discretionary action. An alternative approach to encourage countercyclical action (or to support the structural or medium-term balance rule) requires depositing contingency reserves in a stabilization fund, generated from fiscal surpluses during economic booms, and allows withdrawals to finance deficits during recessions (Argentina, Chile, Ecuador, Estonia, Peru).

The institutional coverage of rules depends mainly on the degree of fiscal decentralization and autonomy of various levels of government or government agencies. As indicated earlier, in decentralized systems, rules are usually established separately at the national and subnational levels of government. The case for subnational rules is particularly strong in Argentina, Brazil, or India, which are confronted with a major fiscal adjustment task that cannot be met by the central government alone. More generally, the larger the share of lower-level governments in the general government, the greater is the need for applying subnational rules to avert free-rider behavior among subnational governments. This argument is equally relevant for national governments within a broad multinational space such as the EU.

The fundamental principle underlying these arguments is that rules, and more broadly, the FRF-need to be imposed at the locus of accountability for policymaking. Stated differently, whereas in a centralized (or unitary) system policy formulation and decisions take place only at the national or central level, in a decentralized system (federation or confederation) they are dispersed among the national and subnational levels of government. In any case, a well-functioning subnational rules requires a stable assignment of revenue sources and
expenditure responsibilities among various jurisdictions, as well as a transparent mechanism of intergovernmental transfers to broadly offset underlying vertical (regional) imbalances. In general, there are two alternative approaches to designing policy rules at the subnational level: the autonomous and the coordinated approach.17

Under the autonomous approach, the initiative for establishing rules rests with individual subnational governments. Following this bottom-up approach, in Canada, Switzerland and the United States, many subnational governments have adopted the golden rule, enforced with varying degrees of stringency, while others retained discretionary policymaking. By and large, in these countries, subnational governments face directly the financial markets to meet their borrowing requirements, and there is rarely a precedent of bailouts of insolvent subnational governments by the national government.

According to the coordinated approach, all subnational governments are subject to uniform rules under the surveillance of a central authority. For the most part, this top-down approach is introduced against the background of past bailouts or under some form of implicit or explicit guarantees to rescue subnational governments in distress. Coordination also becomes necessary in federations (or confederations) where lower levels of government are responsible for the bulk of fiscal activity, with considerable potential spillovers from the misbehavior of one or several government on the collective risk premium of the federation. It is for this reason that all Brazilian states and German Länder are required to follow the golden rule. Similarly, lacking a credible EU-wide no-bailout clause, each EU member country is required by the Stability and Growth Pact to keep its general government accounts close to balance or in surplus over the medium run, subject to the deficit limit of 3% of GDP.19

Procedural rules

Procedural rules encompass the myriad regulations spanning the entire budgeting process from preparation to execution and audit. They can be viewed as underpinning the institutional infrastructure for the operation of a rules-based FRF – though they are just as necessary for discretion-based policymaking. Besides the regulations that normally govern budget practices, key procedural rules include: medium-term budget programming; self-financing requirement for each additional spending or tax cut proposal; end-year closure of unspent appropriations.20

Over the past decade, an increasing number of countries have introduced multiyear budget programming as the context for the annual budget process. Although actual practices (in terms of the degree of detail, realism of underlying macroeconomic forecasts and policy assumptions, etc.) tend to vary among countries, medium-term programming is recognized as a prerequisite for well-informed policymaking and debate.21

More important, a rolling multiyear macro-budgetary program is an essential ingredient for the FRF since it alerts the authorities and financial markets as to the policy adjustments or reform measures that may be necessary for compliance with the framework. Also, it disciplines policymakers and ensures that they are accountable for adhering to budget targets. For these reasons, the preparation of medium-term budget forecasts has become an integral part of fiscal policy rules and of associated reporting requirements in Brazil, New Zealand, Peru, and EU member countries. Specifically, within the euro area, member governments must submit periodic stability programs, and outside the area, they must prepare medium-term convergence programs.

In addition, for compliance with a policy rule, it is useful to establish a mechanism of
mid-course correction for unanticipated deviations from target, unless they stem from cyclical fluctuations covered by escape clauses or can be offset with recourse to a contingency fund. Furthermore, under the so-called pay-go principle popularized by the US Budget Enforcement Act of 1990 any budget proposal involving a revenue loss or expenditure increase must contain an appropriate offset of the budgetary cost, so as to leave the overall budget forecast unchanged (Brazil, New Zealand and several EU members).

Transparency

It is widely recognized that transparency in government structure and operations is essential for effective fiscal policymaking, whether rules or discretion-based. Yet the need for transparency is strengthened in the case of fiscal policy rules, since constraints on policymaking generates pressures for engaging in creative accounting and operating procedures to comply formally, but not in fact, with preset performance indicators as predicted by Goodhart’s Law in reference to monetary targeting.

The benefits from the FRF hinge particularly on the timely availability of reliable, understandable and comprehensive information on the public sector and its intentions. This includes transparency in institutional structure and functions, that is, in the relations within the public sector, as well as the relations between the government and the private sector. Transparency serves to contain or reduce quasi-fiscal activities that are provided through covert subsidies at below-cost pricing, outsourcing, or implicit government guarantees, as a means of circumventing public oversight of explicit budgetary operations.

Equally important is clear and frequent government reporting, as mandated for compliance with fiscal rules in New Zealand, Brazil, UK, and EU. In turn, reports should be prepared not only on a cash basis, but also on the basis of accrual-based conventions which tend to be less prone to creative accounting practices. By the same token, transparency also requires that budget projections, including those in medium-term programs, be supported by realistic macroeconomic assumptions, especially as regards future productivity growth and interest rates.

Surveillance and enforcement

Compliance with fiscal policy rules and procedural rules, along with observance of transparency standards, must be subject to continuous monitoring preferably by an independent authority, in addition to the ordinary oversight and reporting exercised by the media. Beyond traditional auditing of accounts and of legal observance, monitoring the FRF involves real-time surveillance with a broader reach, including assessment of the realism of macro-fiscal projections as well as of the fiscal risks and sustainability over the medium to long run.

A key institutional issue is the nature of the authority responsible for surveillance and enforcement, including the associated transparency requirements. In many cases, this responsibility is exercised by the national audit office (United Kingdom) that reports to the legislature and the public, while ultimate arbitration and judgment usually rests with the courts. The question remains, however, as to the technical competence of these entities in assessing compliance with the rules (including accounting procedures, multiyear programming, etc.). To ensure such competence and independence, for example, in Peru, the surveillance function has been assigned to the central bank. More focused, however, is the approach of specialized institutions (Chile and some EU members) responsible for technical oversight of implementation of
the FRF. A less usual alternative is to entrust this role to an office of experts attached to, and responsible to, the legislature. Though without fiscal rules, the US Congressional Budget Office is regarded as a model of this approach – emulated unsuccessfully in Venezuela.

Some authors have proposed outsourcing of fiscal policy-making to an independent fiscal council. However, unlike monetary policy which can be outsourced to an independent monetary council, such a fiscal council is nonviable because of the difficulty of defining unambiguously a principal-agent relationship at arm’s-length for the conduct of fiscal policy. In fact, nowhere has the proposal of a fiscal council, endowed with policymaking powers, been adopted.

In decentralized systems, the surveillance function is determined by the approach selected for establishing the policy rule. Whereas under the autonomous approach, this function is exercised by the subnational authority, under the coordinated approach it is assumed by a central (national or supranational) authority. In the EU, Ecofin (Council of Ministers for Economy and Finance) is entrusted with the surveillance function, with the support of the Commission and with specialized monitoring (of compliance with accounting standards) by Eurostat (the statistical agency).

Part of the dissuasive function in the enforcement of the FRF concerns the nature and the extent of sanctions for noncompliance with the rules. For the national government or the autonomous subnational government, sanctions usually consist of loss in reputation with the electorate or with financial markets. In a few cases, violation of rules may entail a judicial process which eventually could lead to criminal prosecution of the finance minister or other responsible government officials (Brazil).

In principle, especially in coordinated decentralized systems, financial sanctions are levied on the delinquent government, for instance, in the form of non-interest-earning deposits by EU euro members (to be retained in the budget if the excess deficit is not corrected within a prescribed period), outright fines in Canada and Colombia, or suspension of budgetary transfers in Brazil and the EU (Cohesion Funds in the case of non-euro members). However, in practice, such fines are rarely applied. Apart from the ultimate threat of imposing financial sanctions, the independent authority is responsible for assessing or forecasting the extent of the violation, and for formulating or approving corrective action to be undertaken by the authorities.

**PRELIMINARY RESULTS**

Experience with FRFs has been rather brief, shorter than a decade in most countries. In general, as with any macroeconomic policy rule, including in the monetary area, an FRF needs to be implemented at least over an entire economic cycle and an entire electoral cycle before its effectiveness can fully be assessed. Thus the accumulated experience is only amenable for an initial evaluation of the broad macroeconomic consequences of FRFs and of their possible side effects. In particular, such an assessment may help address occasional claims that rules-based frameworks tend to restrain growth, aggravate fiscal procyclicality, and enhance distortions in the public sector.

The countries that adopted a FRF can be separated into four groups, in accordance with the extent of compliance.

- In the first group, consecutive governments have implemented fully the framework since its introduction. This group includes Brazil, Bulgaria, Chile, Estonia, New Zealand, Peru, and Sweden. Also, a few euro members, notably, Finland, Ireland, and Luxembourg, which comply strictly with the EU Stability and Growth Pact, can be classified in this group as well. All governments in this group adhere to well-
designed policy rules, sound procedural rules, and high transparency standards.

In the second group, compliance with the framework has been mixed in one or several respects: revision or loose interpretation of rules; rules are not binding by design; partial compliance; significant recourse to creative accounting; or suspension of sanctions in case of noncompliance. This group includes the majority of EU members and most other listed countries.

The third group is comprised of countries, such as Argentina and Venezuela, where the framework has been substantially diluted or abandoned soon after introduction.

The fourth group includes countries with insufficient or no track record at all: in India the FRF has been introduced very recently at the union and state levels, and in Nigeria, enabling legislation is still pending.

In general, the experience of these countries confirms the truism that a rules-based FRF alone, without the political will to enforce it, is doomed to failure. Perhaps this is best illustrated by the case of Argentina, where enactment of fiscal responsibility legislation was not sufficient by itself to prevent fiscal indulgence and thus to avert the crisis of 2001. Stated differently, the FRF can be regarded as a formal expression of the political will to maintain fiscal discipline. In sum, the FRF statute is not a magic wand that guarantees responsible fiscal policy.

An initial evaluation of the effects of the FRF must focus on the first group, namely, where compliance with a well-designed framework has been satisfactory. All countries that belong to this group were successful in eliminating the deficit bias and in reducing the public debt-GDP ratio since the introduction of the FRF. With improved debt sustainability, investor confidence was restored, and inflation and real interest rates abated. In these countries, growth rate was higher and volatility was lower than in comparable regions (see Table 2).

On the other hand, external performance was uneven, reflecting the combined contribution

<table>
<thead>
<tr>
<th>Country, Effective date</th>
<th>GDP growth rate(^1) (geometric mean)</th>
<th>GDP growth volatility(^1) (coefficient of variation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand (1994)(^2)</td>
<td>3.6 (2.7)</td>
<td>0.2 (0.3)</td>
</tr>
<tr>
<td>Sweden (1997–98)</td>
<td>3.0 (2.1)</td>
<td>0.4 (0.5)</td>
</tr>
<tr>
<td>Euro Area: Finland (1998)</td>
<td>3.3 (2.1)</td>
<td>0.4 (0.5)</td>
</tr>
<tr>
<td>Euro Area: Ireland (1998)</td>
<td>6.8 (2.1)</td>
<td>0.4 (0.5)</td>
</tr>
<tr>
<td>Euro Area: Luxembourg (1998)</td>
<td>5.0 (2.1)</td>
<td>0.5 (0.5)</td>
</tr>
<tr>
<td>Bulgaria (1998)</td>
<td>4.6 (3.8)</td>
<td>0.2 (0.6)</td>
</tr>
<tr>
<td>Estonia (1998)(^2)</td>
<td>7.2 (3.8)</td>
<td>0.2 (0.6)</td>
</tr>
<tr>
<td>Chile (2000)</td>
<td>4.4 (2.9)</td>
<td>0.4 (0.8)</td>
</tr>
<tr>
<td>Peru (2000)</td>
<td>4.0 (2.9)</td>
<td>0.6 (0.8)</td>
</tr>
<tr>
<td>Brazil (2001)</td>
<td>2.2 (2.6)</td>
<td>0.8 (0.9)</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund

\(^1\) Calculated since effective date of FRF through 2005. Mean and coefficient of variation corresponding to comparator regions are shown in parentheses: advanced economies for New Zealand; EU euro area for Finland, Ireland, Luxembourg, and Sweden; Central and Eastern Europe for Bulgaria and Estonia; and Western Hemisphere for Chile, Peru, and Brazil.

\(^2\) For New Zealand and Estonia, calculations exclude observations of zero growth in 1998 and 1999, respectively, in the wake of the Asian and the Russian crises.
of the public sector balance and private sector (dis)saving to the current account balance.

As a major exception among complying countries, in Brazil, growth remained lackluster owing mainly to unfinished structural reforms. However, following a spike during the 2002 presidential election campaign, Brazil has enjoyed a significant decline in risk premium on sovereign borrowing, once investors felt reassured that the center-left government would abide by the FRF. Arguably, Brazil’s success must be gauged by the ability to stave off a potential financial crisis rather than simply by growth performance.

In addition to the vanishing deficit bias, by and large, compliance with FRF did not entail procyclicality and added budget distortions. Yet not all countries have been equally successful on this score. Some highly-indebted emerging market economies, with only a brief experience with the FRF, had failed to convince investors that a downturn in activity warranted a fiscal expansion – even absent a deterioration in the structural budget balance. In these countries, application of the FRF is likely to remain procyclical (that is, disallowing budget deficits) during recessions until credibility has been fully restored.

By the same token, in some countries, especially during downturns, compliance with the FRF was achieved with some budget distortions (including through suspension or abandonment of infrastructure projects), though to a lesser extent where rules were specifically designed to prevent these distortions. In Brazil, for instance, limits on wage and pension expenditures are intended to contain such expenditures in proportion with other outlays. Further, the current balance requirement (the golden rule) is meant to protect investment spending from budget reductions.

More generally, a number of countries attempted to meet the FRF by relying on stop-gap measures (one-off expenditure cuts or tax hikes) while postponing key structural reform steps in social security and taxation. These countries include, besides Brazil, many EU members, including those in the second group that, as a result, were able to comply only for a short period or failed altogether. At the other end of the spectrum, Chile, Finland and Sweden stand out as examples where a major overhaul of public finances paved the way to strict compliance with the FRF.

Admittedly, any assessment of the effects of rules-based FRFs can only be tentative and incomplete at this time. Various limitations include sample selection and identification. As mentioned, in some countries, the FRF is an integral component of a broader rules-based macroeconomic policy framework that incorporates a hard exchange rate peg or inflation-targeting as well. Such a change in fiscal and monetary policies – in a few cases accompanied or preceded by major structural reforms – can be viewed as a comprehensive regime shift. In all, a definitive evaluation of FRFs must await a longer historical record, possibly along with a larger set of comparable country observations and against a counterfactual baseline scenario. All caveats notwithstanding, experience accumulated thus far suggests that the FRF can contribute significantly to restoring policy credibility and placing the economy on a higher and sustained growth path.

LESSONS FOR HUNGARY

Hungary faces an extraordinary challenge in its public finances. In 2006, the general government deficit had reached nearly 10 % of GDP, the highest imbalance in the European Union. Public debt is rising well above 60 % of GDP. Even under relatively optimistic macroeconomic assumptions, medium- and long-term scenarios point to a fiscal sustainability problem.

In the past decade and a half, Hungary has experienced all the fiscal problems enumerated
The dominance of the political cycle over the economic cycle is evident in any time series data on government finances. Fiscal deficit peaks since the beginning of the post-socialist transition coincide with election years (1994, 1998, 2002, 2006). The deficit bias has intensified in recent years. Furthermore, time inconsistency is illustrated by the widening gap between medium-term deficit targets and actual outcomes in the official pre-accession and convergence programs submitted to the EU authorities (see Figure 1).

In addition to time inconsistency, the common-pool problem has been manifest within the central government, as spending ministries tend to represent competing claims of various interest groups (farmers, teachers, health-care employees) on public resources. Consequently, the deficit bias, driven mainly by the rise in social transfers and runaway personnel costs, is felt along with procyclicality and expenditure distortions.

Clearly, Hungary needs to address these fiscal problems urgently, above all in order to restore credibility and sustainability, and thus to reduce its vulnerability to a financial crisis. Besides, by virtue of EU membership, the government has been under obligation to comply with the excess deficit procedure under the SGP by preparing and updating periodic medium-term convergence programs. As part of the current program, the government is committed to reducing significantly the budget deficit, albeit initially by relying mainly on stop-gap measures. To support this effort, the government is required by law to generate a primary balance or surplus by 2008.

Although laudable, these steps may not be sufficient by themselves to correct any time soon the underlying fiscal problems and to reverse the erosion in the credibility attributable to the wide budgetary overruns in the past. Therefore, besides observance of the Pact, Hungary should consider adopting – as many other EU members do – a strict but realistic national rules-based FRF within the broader

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Figure 1

**HUNGARY: GENERAL GOVERNMENT BALANCE, ACTUAL AND FORECASTS, 1997–2010**

(in percent of GDP)

Sources: Ministry of Finance and Central Statistical Office.
envelope of the Pact. In this regard, there are five relevant lessons that can be distilled from the international experience.

- The first lesson is to extend the institutional coverage of the rules-based framework to the entire public sector, including all off-budget operations and decentralized entities of the central government, along with real-time recognition of the losses of state-owned enterprises. Further steps for enhancing transparency would include proper accounting of expenditure programs that give rise to contingent liabilities—including public-private-partnership projects. Also indispensable is the preparation of fiscal forecasts based on prudent macroeconomic assumptions and reliable parameters linking them to fiscal variables.

- The second lesson is to strengthen procedural rules, including strict interpretation and enforcement of the pay-go principle in budget legislation. A major innovation, consistent with the obligation to prepare and implement the convergence program under Pact, would consist of the introduction of a three-year budgetary plan. The latter would operate as a rolling (eliminating the earliest year and adding a new future year in each consecutive year) indicative plan to guide annual budgetary decisions. Also, it would serve as the basis for setting an annual limit on nominal primary expenditures over the medium term. Eventually, observance of this limit should permit cutting high statutory tax rates on personal income, payroll, and value added—all excessively high in Hungary in comparison to neighboring countries.

- The third lesson, in view of the need to accelerate the debt reduction process, is to introduce a structural primary surplus rule—along the lines of Brazil’s main policy rule—calibrated to reduce the public debt ratio to, say, below 50% of GDP or less, by 2015 at the latest. This rule would be a logical extension of the primary balance target after 2008. After reaching the debt ratio target, the government would simply be bound by the medium-term overall balance obligation under the Pact. In combination with the primary expenditure limit, the primary surplus rule would facilitate countercyclical behavior.

- The fourth lesson involves the adoption of a subnational current balance rule applicable to all local self-governments. Such a rule, common in many fiscally decentralized countries, would impose some discipline at the subnational level but without undue constraint on borrowing for much-needed public investment at that level. A critical condition for such a rule is an intergovernmental agreement on a transparent (possibly formula-based) allocation of revenue and spending responsibilities, as well as of compensatory transfers. The need for a subnational rule is likely to increase due to the fiscal stress from compliance with primary surplus and expenditure rules by the central government.

- Finally, it is necessary to establish an independent surveillance authority to continuously monitor compliance with all elements of the FRF, especially the primary surplus and primary expenditure rules, the three-year budget plan, and the fiscal forecasts, along with the accompanying transparency standards. This institution would recommend corrective steps and sanctions in the event of slippages with respect to the FRF. Also, it would identify key reform areas to ensure viability of the framework over an extended time horizon. In view of the current political polarization, it might be difficult to envisage the creation of an impartial office within the parliament. As an alternative, the responsibilities of the State Audit Office could be strengthened and expanded to include such an enhanced surveillance role.

As elsewhere, an important prerequisite for successful implementation of the FRF in Hungary is the phase-in of structural reforms that ensure sustainability of the rules, in the face of rigidities in public sector employment,
demographic pressures, and regional imbalances. Indeed, progress needs to be made, as rapidly as feasible, on various fronts: public pensions, health care, taxation, and intergovernmental finances. Needless to say, this effort must be underpinned with strict fulfillment of the most recent convergence program submitted to the EU authorities.

In addition, successful preparation of the rules-based FRF entails a concerted outreach campaign, including public education and media coverage to generate sufficient public understanding of the need for such a framework and to gain widespread support for its implementation (Brazil, New Zealand, EU). This campaign must be accompanied by a political debate that will lead to broad legislative consensus for the introduction of the FRF. Failure to engage the electorate and the legislature in the preparatory process can undermine at the very outset the credibility of any well-designed FRF.

SUMMARY AND CONCLUSIONS

In an effort to correct worrisome trends in fiscal policy – deficit bias, procyclicality, and structural distortions – over the past decade, an increasing number of countries introduced a rules-based fiscal responsibility framework (FRF). The adoption of such a framework, often in tandem with a rules-based monetary policy – in the form of an inflation targeting or a fixed exchange rate regime – can be seen as best practice to mitigate the vulnerability to financial crises in an international environment characterized by high capital mobility. In some cases, notably in the EU, the FRF is intended to mitigate the adverse spillovers from freerider fiscal behavior of EU members on the rest of the membership.

In broad terms, the FRF is characterized by (numerical) fiscal policy rules, procedural rules, transparency standards, and a surveillance and enforcement mechanism. Although these components vary widely across countries in terms of statutory basis, institutional coverage, detail, strictness, and emphasis, they impose a permanent constraint on the conduct of fiscal policy.

In spite of the brief track record, preliminary evidence suggests that compliance with a well-designed FRF contributes to building policy credibility, to reducing risk premia, and (as compared to regional averages) to boosting economic growth and to lowering output volatility. The effect on the external balance is uneven, as this reflects private saving as well. The FRF is usually implemented with a neutral or countercyclical fiscal stance, except in highly-indebted emerging-market countries where recessions have been met with a procyclical adjustment. Whereas in some countries compliance has been accompanied by public sector reforms, in others it was achieved through reliance on stop-gap measures.

After a decade and a half of persistent fiscal imbalances, along with a sharp buildup of public indebtedness, the Hungarian authorities and public opinion seem to be ready to explore the design of a FRF, drawing on a rich international experience. Much like other EU members, whether inside or outside the euro area, Hungary would greatly benefit from the adoption of a custom-designed national rules-based framework, fully compatible with the broader envelope of the Stability and Growth Pact.

There are five major lessons from the international experience that are relevant for Hungary. First, transparency would be enhanced with extension of the coverage of the FRF to the entire public sector; full accounting for contingent liabilities; and preparation of prudent fiscal projections. Second, it is necessary to strengthen procedural rules, including implementation of the pay-go approach to budget legislation and routine preparation of a rolling three-year bud-
get program, setting an annual limit on the nominal level of primary expenditures. Third, in order to reverse the recent accumulation of public debt, the phasing in of a primary surplus rule, calibrated to the path of desired debt reduction-following fulfillment of the primary balance target set for 2008—should be seriously considered. Fourth, a current balance rule at the local self-government level would be a useful complement to fiscal rules assumed for the general government as a whole. And fifth, compliance with the FRF would need to be monitored on a continuous basis by an independent authority. The State Audit Office, if legally and technically strengthened, seems to be an appropriate candidate for this task.

Successful implementation of the FRF presupposes progress on several fronts, and in particular, a sustained effort in completing ongoing reforms in public pensions, health care taxation, and intergovernmental finances, as well as strict observance of the convergence program submitted to the European Commission. In addition, to bolster credibility and support for the FRF, the authorities need to engage in a concerted public outreach campaign and in an open political debate that would lead to broad legislative consensus.

The FRF would surely pave the way to Hungary’s entry in the euro area within a reasonable time horizon. But more important, its implementation would mitigate Hungary’s vulnerability to a potential financial crisis in the near term, and would contribute to a higher sustained growth and prosperity in the medium to long term.

APPENDIX

SIMPLE ARITHMETIC OF FISCAL RULES

A fiscal policy rule can be specified in terms of a gradual reduction in the public sector debt to (or maintenance at) a prudent level or as a ratio to GDP. At the same time, this objective may be sufficiently flexible to accommodate the effect of automatic stabilizers.

The intertemporal determination of public debt can be expressed as

\[ d_t = \left( \frac{1 + i}{1 + g} \right) d_{t-1} - bt \]

where (as a proportion of GDP, unless otherwise indicated)
- \( d \) = stock of public sector debt
- \( i \) = average nominal interest rate on public debt
- \( g \) = nominal trend GDP growth rate
- \( b \) = primary budget surplus.

In a highly indebted country, the authorities will target

\[ d_{t+n}^2 < d_t \]

which is to be met within \( n \) years, with a minimum annual reduction of \( x \) in the debt ratio, by means of an operational rule expressed in terms of the cyclically-adjusted primary surplus

\[ b_t^* = (i - g) d_{t-1} + x \] (1)

Further, the operational target is defined in reference to trend growth

\[ b_t^* = r_t (1 - \alpha \text{GAP}_t) - c_t (1 + \beta \text{GAP}_t) - k_t \]

where
- \( r \) = government revenue
- \( c \) = primary current expenditure
- \( k \) = capital expenditure
- \( \alpha \) = revenue elasticity with respect to GAP
- \( \beta \) = expenditure elasticity with respect to GAP
- GAP = difference between actual GDP and trend GDP.
Therefore,

\[ b_t < b_t^* \] is allowed when \( GAP_t < 0 \)

and

\[ b_t \geq b_t^* \] is required when \( GAP_t > 0 \).

Compliance with rule (1) may be accompanied by variations in the debt ratio that reflect deviations from trend growth rate: the debt ratio falls (increases) with positive (negative) deviations and remains unchanged when the economy is on the trend growth path.

Rule (1) implies that if the targeted reduction in the debt ratio is set equal to the growth rate, \( x = gd_{t-1} \), then the target primary surplus becomes

\[ b_t^* = id_{t-1} \tag{2} \]

which implies overall balance. In the event, the balanced-budget rule (2) leads to a fall in the debt ratio equivalent to the growth rate.

As an alternative, of particular relevance for a country in need of infrastructure expenditure with a high expected social rate of return, the target may be reset according to the golden rule, requiring current balance,

\[ b_t^* + k_t = id_{t-1} \tag{3} \]

Rule (3) should be, of course, easier to meet than either (1) or (2), though it still results in a fall in the debt ratio to the extent that \( k_t < gd_{t-1} \).

However, a preferable approach would be to redefine the golden rule in terms of an operating balance requirement (i.e., equivalence between current revenue and current expenditure, including depreciation allowances), following accrual-based accounting,

\[ b_t^* + k_t - \delta_t = id_{t-1} \tag{4} \]

In addition, a balanced-budget may be supplemented with an expenditure limit, set on primary spending or a major component thereof, such as the wage bill. To safeguard it from cyclical fluctuations in output or prices, the limit can be set in proportion to trend GDP.

**Notes**

1 For a basic discussion of the issues and practices in advanced economies, see Kopits and Symansky (1998) and Banca d’Italia (2001). On practices in emerging-market economies, see Kopits (2004).


3 See the analysis of the common pool problem in Persson and Tabellini (2000).

4 For evidence on procyclical policies in the EU, see European Commission (2000), and the U.S., see Taylor (2000).


6 For recent calculations of debt sustainability in EU member countries, see Deroose and others (2006).

7 For evidence on procyclicality, see Gavin and others (1996) and Kaminsky and others (2004).

8 Fatás and Mihov (2003) estimated these effects for a large sample of advanced and emerging market economies.

9 See Kopits (2000).

10 See Kopits and Symansky (1998).

11 See Kopits (2001).

12 Again, possible exceptions are countries without the precedent of bailouts of defaulting subnational governments by the central government. In such cases, credit rating agencies assess risk separately for the borrowing government in each jurisdiction.

13 There is no specific debt ratio that meets this criterion. However, in practice, a debt ratio of up to 40% is usually regarded prudent for an emerging market economy. Obviously, a much higher ratio can be acceptable for an advanced economy or any economy with solid export earnings, broad tax base, strong financial or resource endowment, etc. See,
for example, International Monetary Fund (2003) and Hausmann (2004).

14 In Sweden, the structural surplus target has been set at 2% of GDP to capture the favorable effect of the operations of government-mandated pension funds, included in the general government accounts. In Chile, the target of 1% of GDP is intended to cover central bank losses.

15 According to the reform of 2005, the EU Stability and Growth Pact prescribes a medium-term position of close to balance or in surplus for high-debt members while allowing a deficit of up to 1% of GDP for high-growth low-debt members.

16 See Rattso (1998) for an analysis from the Scandinavian perspective.

17 For a comparison of the two approaches in Argentina and Brazil, see Kopits, Jiménez, and Manoel (2000).

18 For a recent review of the vast literature U.S. experience, see Besley and Case (2003).

19 Within the EU, several governments have already adopted derivative EMU rules at the national and subnational levels of government; see European Commission (2006).

20 See, for example, Poterba and von Hagen (1999).

21 For an overview of multiyear budgets and fiscal targets in OECD countries, see OECD (1995).

22 See an early overview in Kopits and Craig (1998), which forms the basis of the International Monetary Fund’s Code of Good Practices in Fiscal Transparency.

23 For example, as in New Zealand, Australia’s Charter of Budget Honesty Act of 1998–albeit without a fiscal policy rule—requires the national authorities to publish fiscal strategy statements; annual and mid-year reports on fiscal outlook and outcome; intergenerational reports; and pre-election economic and fiscal assessments.

24 According to Charles Goodhart, a numerical indicator, such as a monetary aggregate, is no longer a reliable measure if it is used as a policy target or performance variable.

25 This is illustrated, for example, by the requirements under EMU to follow accrual-based accounting; to classify privatization receipts as financing in the calculation of the budget balance; to measure debt on a gross basis; and to expand coverage to the general government.

26 Calculation of the cyclically-adjusted balance, to determine compliance with a structural budget rule, need to be based on transparent and realistic estimates of the output gap. For opaque practices in the Netherlands in the 1960s, see Wellink (1996). A recent discussion of measurement difficulties can be found in Kiss and Vadas (2006).

27 For a description of such institutions in EU members, see European Commission (2006).

28 See, for example, Eichengreen and others (1999) and Wyplosz (2002).

29 As a possible exception, in Nigeria, pending legislation assigns a prominent executive role to a fiscal council, including in the management of a common saving fund. The council is envisaged to be comprised of representatives of federal and state governments in order to gain the confidence and support of state governments, a necessary condition for the passage of the Fiscal Responsibility Bill.

30 See the discussion in Kopits (2001) and Schick (2004), and the cross-country evidence for Europe in Debrun (2007).

31 Measured in terms of the EMBIG index, market perceptions of Brazil improved significantly over this period. In spring 2002, the spread on government paper jumped from 600 bps to over 2,000 bps. Since then, it declined gradually to its current level of around 200 bps.

32 These findings are in line with the statistical evidence covering a wide range of countries with fiscal rules, reported by Manasse (2006).

33 In addition, for some countries, growth calculation on Table 2 may reflect some reverse causality from adherence with the framework, despite efforts to minimize this possibility by defining compliance in terms of structural fiscal balances and by covering a sufficiently long period to average out cyclical fluctuations.

34 For a recent characterization of Hungary and Italy as suffering from an endemic case of “fiscal alcoholism,” see Kopits (2006b).
35 Kopits (2006a) discusses fiscal behavior in Hungary from a political economy perspective. For an analysis of comparable conditions in other new EU members in Central Europe, see Kopits and Székely (2004) and Berger and others (2007).

36 It should be noted that official data on the deficit are slightly overstated for 1998 and 2002, as they reflect recognition of losses accumulated by certain state-owned enterprises in previous years.

37 The author is grateful to Gabriella Tésy for compiling the data underlying Figure 1.

38 Under the present convergence program, the government is committed to zero primary balance for 2008, 0.9% of GDP for 2009, and 1.1% of GDP for 2010.

39 Most recently, on March 22, 2007, Finance Minister Steinbrück announced an initiative to reform Germany’s golden rule currently applicable at the federal and lander levels, in line with the Pact.

40 See the derivation of the primary surplus target from the desired debt reduction path in the Appendix.

41 In retrospect, social security reform in the initial convergence to the EMU fiscal reference values would have prevented the current difficulties faced by a number of euro members in abiding by the Pact. See an early discussion in Kopits (1997). For a broad overview and quantification of the tasks ahead in all EU members, see European Commission (2006).

42 In Peru, the rushed enactment by the Fujimori administration, in December 1999—following only a brief legislative debate—doomed the first version of the FRF. The resulting loss in credibility could only be restored with an extended debate and passage of an amended law by the subsequent democratically-elected congress.

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Expenditure ceilings and fiscal policy

Swedish experiences

In the late 1990s the Swedish budget process and fiscal framework were thoroughly reformed, and in 2006 the new system had been in place for eight years. The aim of this paper is to describe this system, with an emphasis on expenditure ceilings, and to discuss the experiences gained so far. The paper is organized as follows: First the reforms of the budget process and the Swedish fiscal framework are presented. Especially, the relation between expenditure ceilings and the surplus target is explained. Then the paper discusses the track record of the expenditure ceilings, describes the budget margin mechanism and the principles for deciding the nominal levels of the ceilings. After that the paper highlights some problems with the system. Then the functioning of the system over the economic cycle 1998 to 2005 is discussed. Finally, the conclusions are summarised.

DESCRIPTION OF THE FISCAL POLICY FRAMEWORK

Budget process and expenditure ceilings

The Swedish public finances went through two weak periods in the last decades – first in the early 1980s and then in the early 1990s. The latter episode was the most severe fiscal crises after the second World War, and probably one of the deepest one in the industrialized world at that time. This pronounced weakening was influenced by the international slowdown, but had without doubt also domestic causes related to stabilization policy, sequencing of deregulation and to the wage formation process. At that time it was also observed that the Swedish budget process was rather loose and could have contributed to the crises. A reform process was initiated, which led to substantial changes in the budget process later in the 1990s. Central features of the new budget process, implemented in January 1997, are a “top-down” budgetary process, multi-year expenditure ceilings and a medium-term target for the government’s net lending.
The “top-down” budget process assigns a clear role to the Ministry of Finance in drawing up the budget. The multi-year framework includes nominal expenditure ceilings for the coming two or three years. For the two coming fiscal years \((t+1\) and \(t+2\)) these ceilings are already laid down in decisions of earlier years. The Government’s proposal for the new expenditure ceiling three years ahead \((t+3)\) is discussed and decided at a cabinet budget meeting in August. The discussion is based on a proposal from the finance minister. The level of the expenditure ceiling for year \((t+3)\) is presented to the Parliament in the Budget bill in September and is approved by the Parliament in November. The decision is a guideline decision that can be changed by a new decision by the Parliament. A lot of political prestige has, however, been invested in the expenditure ceiling and there are strong political commitments to maintain the ceiling at the decided level.

The new budget process also includes a so-called two-stage frame decision process. Total expenditure is divided into 27 different expenditure areas for the coming fiscal year, for each of which the Parliament first determines a budget frame. This decision must comply with the previously set expenditure ceiling for year \(t+1\). The Parliament then approves the level of the appropriations within each expenditure area. The total sums of the appropriations must not exceed the previously determined budget frame. Hence, additional spending on one appropriation must be matched with corresponding spending cuts within the same expenditure area. Otherwise the proposal will not be permitted to be discussed by Parliament. The new decision process in Parliament has reduced the size of parliamentary amendments to the Government’s budget. Indicative frames for the expenditure areas for years \(t+2\) and \(t+3\) are also approved by the Parliament as a starting point for the preparation of future budgets.

The ceiling includes central government expenditures and expenditures of the pension system outside the budget, but not interest expenditures, and covers approximately two thirds of total general government expenditures. Cyclically sensitive expenditures, such as expenditures on active labour market programmes, unemployment benefits and social security are included. Inflation is treated as all other factors affecting expenditures without any automatic adjustments. Interest costs are excluded with the argument that in the short term it is not possible for the government to influence them. Local government’s expenditure is excluded with the reference to the autonomy of this level of the government. The basic rules governing the budget process, including the expenditure ceilings, have been collected in a budget act since 1997.

The surplus target

The fiscal policy framework implemented in the late 1990s includes two targets at the national level. In addition to the expenditure ceiling there are also surplus targets that cover the general government sector, i.e. the central government, local governments and the old age pension system. The target, which is set for the medium term, is that the general government net lending (according to ESA95) should amount to 2 per cent of GDP per year on average over the business cycle. One indicator of the targets is that the structural surplus (adjusted for the cycle and one-off measures) should amount to 2 per cent of the GDP. Other indicators are averages over periods of several years indicating a cycle.

In practical implementation ex ante the medium-term target is translated into an annual target for the actual budget surplus in year \(t\) and \(t+1\). This annual target is proposed by the Government in the Budget Bill for the year \(t+1\) in September in year \(t\) and is approved by
Parliament later in the autumn. The targeted surplus could deviate from 2 per cent of the GDP for two reasons. First, the cyclical situation (measured as the GDP-gap) is normally taken into account when the annual target is set. Secondly, a large initial deviation from 2 per cent could motivate a slower adjustment back to the targeted level than within one year.

The annual targets were fulfilled in the years 2000, 2001, 2004 and 2005. In 2002 and 2003 unexpected weak growth and expansionary fiscal policy contributed to the outcomes. (See Table 1)

**The aim of the surplus target**

The main motive of the surplus target is to reduce public debt to account for the budgetary impact of an ageing population. Thus, the target is forward-looking. The dependency ratio of the elderly related to the working population will increase rapidly after 2010. To hold a surplus of public net lending at an average rate of 2 per cent, during the coming decade public debt and interest payments will have to be reduced. This will diminish the need to for budgetary retrenchment (e.g. tax increases) when costs for the ageing population starts to rise, and will also smooth the tax burden across generations. The sustainability criterion behind the choice of surplus target is that the debt situation should not deteriorate over a foreseeable period, which is long enough to include the demographical structural change. The estimates presented in the Updated Swedish Convergence Programme 2006 results in a central government ratio 2050 that is lower than today. The calculations include the assumption that the surplus target is reached by 2015.7

A second motive of the surplus target is to maintain a margin large enough to avoid excess deficits according to EU fiscal rules, defined as deficits exceeding 3 per cent of the GDP, and to fulfil the Stability and Growth Pact’s (SGP) medium-term target of a budget position of “close to balance or in surplus”. For Sweden, with relatively large expenditure and revenue ratios, a small structural surplus is needed to give room for automatic stabilizers and for other types of budget uncertainty.8 However, the Swedish national surplus target is somewhat more ambitious compared to the SGP-target. Hence, besides automatic stabilizers there could be some room for discretionary policies when there are risks for larger output gaps.

Accomplishment of the medium-term target also helps to support the credibility of the budget policy and thereby supports monetary policy and moderate market interest rates. This may have positive effects on investments.

**Why two targets?**

The surplus target could be seen as the overarching target and the expenditure ceilings as operational supplements to the surplus target. However, the expenditure ceilings also have their own virtues, see Section 3.

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**Table 1**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual target</td>
<td>2.0</td>
<td>2.5</td>
<td>2.0</td>
<td>2.0</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Outcome</td>
<td>5.0</td>
<td>2.6</td>
<td>-0.5</td>
<td>-0.2</td>
<td>1.6</td>
<td>2.8</td>
<td>—</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance and Statistics Sweden
There exist several motives behind the system with two targets. First, even if the surplus target promotes long-term sustainability and secure room for automatic and active stabilization policies, it does not constrain the levels of total spending and total tax revenues. However, together with the surplus target, the level of the expenditure ceiling determines an implicit target for the tax level. A separate revenue target is therefore not needed, but a desired tax level could guide the choice of the expenditure ceiling.

Second, a top-down budget process, where a target for total expenditure is decided before expenditure details, makes budget choices more explicit and results in improved argumentation for new spending proposals. This should in turn lead to improved allocation of the budget of scarce resources.

Third, a multi-annual expenditure ceiling set in advance might prevent a situation where temporary high tax revenues are used to pay for permanently higher spending. Hence, a procyclical policy can be avoided in periods of cyclical upturns on the expenditure side of the budget. The multi-annual system supports a long-term direction of fiscal policy, and strengthens its credibility.

For practical application the expenditure ceilings have advantages compared to the surplus target. The nominal ceilings are highly transparent, a strict ceiling is expressed as a simple figure in SEK, and therefore they are easy to monitor. The experience gained so far shows that this contributes to the political commitment to keep the target and that there are substantial political costs not to do so.

Other institutions monitor the ceilings, most strictly the National Financial Management Authority (ESV). On several occasions in autumn this authority has reported that the ceilings have been threatened and such reports have been published in the media. On such occasions the government has so far always corrected its expenditure policy to comply with the target. The medium-term surplus target on the other hand is a symmetric target and is less easy to monitor. Measures of structural balances could be used as indicators of compliance but they are notoriously uncertain. Also, the length of the cycle is not a clearly defined concept.

**TRACK RECORD OF EXPENDITURE CEILINGS 1997–2004**

The level of the expenditure ceiling

General government expenditure as a percentage of the GDP rose sharply during an economic crisis in the early 1990s. In 1993, the expenditure to GDP ratio amounted to 70.4 per cent of the GDP. The savings in the consolidation programme, which was implemented in 1994 and became fully effective in 1998, contributed to a fall in the expenditure to GDP ratio. After the completion of the consolidation programme, the general government expenditure continued to decline as a percentage of the GDP between 1998 and 2000, from 58.2 per cent in 1998 to 54.2 per cent in 2000. This fall in the expenditure ratio was mainly a consequence of relative restrictive levels of the expenditure ceilings these years. As a percentage of the GDP, the expenditure ceiling fell by about 2.5 per cent between 1998 and 2000. During the same period the tax ratio increased by about 1 percentage point, and general government net lending increased from 1.9 to 5.0 per cent of the GDP. Hence, during these years the expenditure ceiling prevented a situation where temporary high tax revenues, due to a cyclical upswing, were used to finance permanently higher spending.

Corrected for technical changes, the expenditure ceiling was set at a relatively stable level of almost 33 per cent of the actual GDP for the period 2000–2004. However, since average eco-
nomic growth has been lower than trend growth during these years the expenditure ceiling as a percentage of the potential GDP has decreased somewhat since 2000. During the same period primary general government expenditure including local governments according to the National Accounts is expected to increase by about 0.8 per cent of the GDP to 52.5 per cent 2004, see Table 2.11 The expenditure ceilings have, so far, been effective in restraining the growth of public expenditures and in maintaining a structural surplus in general government finances.

Corrected for technical changes, the expenditure ceiling decreased from 36.2 per cent of GDP in 1997 to 32.5 per cent of GDP in 2005. (See Table 3) The ceilings that are now in effect up to year 2008 imply that the expenditure ratio will continue to decline over the next few years.

The budget margin

A critical feature of the expenditure ceiling is that it has an ex post dimension. It should be implemented in such a way that the outcome of the ceiling-restricted expenditure is below the decided expenditure ceiling. It is not enough that the target is met ex ante when the ceiling is determined three years in advance or at the time of budget approval.

Since the ceiling limits the actual expenditure – not just appropriated funds – one has to take uncertainty into account in the expenditure forecast. To accommodate the impact of unanticipated developments there is a buffer – a so-called budget margin – between the ceiling and the ceiling-restricted expenditures. The main purpose of the budget margin is to absorb fluctuations in the expenditure level due to changes in the business cycle and other macroeconomic uncertainties. The margin should also absorb the uncertainty that is caused by the fact that Swedish agencies can shift the consumption of appropriated funds between years.12 However, the budget margin does not only serve as a contingency reserve. Given that the margin is considered large enough to handle uncertainty, the margin also leaves some scope for future spending reforms. Hence, this part of the margin has

---

**Table 2**

EXPENDITURE CEILINGS ADJUSTED FOR TECHNICAL CHANGES (billion SEK)

<table>
<thead>
<tr>
<th>Year</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure ceiling</td>
<td>702</td>
<td>699</td>
<td>714</td>
<td>723</td>
<td>749</td>
<td>773</td>
<td>803</td>
<td>836</td>
<td>870</td>
</tr>
<tr>
<td>Per cent of GDP</td>
<td>36.4</td>
<td>35.3</td>
<td>34.3</td>
<td>32.9</td>
<td>33.0</td>
<td>32.9</td>
<td>32.9</td>
<td>32.8</td>
<td>32.5</td>
</tr>
<tr>
<td>Expenditure under the ceiling</td>
<td>678</td>
<td>697</td>
<td>712</td>
<td>718</td>
<td>744</td>
<td>773</td>
<td>800</td>
<td>834</td>
<td>864</td>
</tr>
<tr>
<td>Per cent of GDP</td>
<td>35.9</td>
<td>35.3</td>
<td>34.2</td>
<td>32.7</td>
<td>32.8</td>
<td>32.8</td>
<td>32.8</td>
<td>32.7</td>
<td>32.5</td>
</tr>
<tr>
<td>Budget margin</td>
<td>24.0</td>
<td>2.0</td>
<td>1.5</td>
<td>5.0</td>
<td>4.7</td>
<td>0.4</td>
<td>2.9</td>
<td>2.4</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Sources: Ministry of Finance and Statistics Sweden

**Table 3**

GENERAL GOVERNMENT EXPENDITURE (per cent of GDP)

<table>
<thead>
<tr>
<th>Year</th>
<th>1997</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure</td>
<td>60.5</td>
<td>58.2</td>
<td>57.2</td>
<td>54.2</td>
<td>53.7</td>
<td>55.3</td>
<td>55.4</td>
<td>53.8</td>
<td>53.5</td>
</tr>
</tbody>
</table>

Sources: Ministry of Finance and Statistics Sweden
served as a planning reserve for future, not yet decided or announced, spending initiatives.

A large budget margin will substantially reduce the risk of an overrun of the ceiling and the need for active measures in case of such a risk. It also gives room for the operation of the automatic stabilizers on the expenditure side of the budget to operate. On the other hand, too large a margin softens the budget constraint; so a trade-off has to be made when the expenditure ceiling and the budget margin are determined three years in advance. There is no established principle for determining the appropriate size of the budget margin. When the ceiling has been set for the third additional year in the three-year budget framework the budget margin has normally amounted to about 2 per cent of the expenditure ceiling. Since the uncertainty in the expenditure level is smaller for the coming two years, a smaller budget margin has been accepted for these years.

Table 2 shows the outcome of budget margins for 1997–2005. We see that the expenditure ceiling was met every year since its introduction in 1997. In 1997 the budget margin was relatively large in relation to the expenditure ceiling. Between 1998 and 2005, however, the outcome of the budget margin was relatively small, just a fraction of a per cent of the expenditure ceiling. The budget margins are expected to be larger between 2006 and 2008.

Since 1998 the budget forecasts for the current year have usually indicated a risk of an overrun of the expenditure ceiling. The reason for this is, among other things, that the new expenditure reforms were decided after the level of the expenditure ceiling was approved and the economic downturn in the economy that began in 2001. This development created a pressure on the expenditure ceiling, mainly through higher than expected unemployment benefits. The small budget margins were also to a large extent caused by higher than expected costs for sick leave insurance. In 1997 the number of people on sick leave was at a historically low level. In 1998, this number started to increase. This increase was forecasted not to last long. Because the increase from 1997 onwards was not forecasted, it took a long time for the Government to react to it. In 2002, an all-time high was reached. Hence, from 1997 to 2003, the total costs for sickness benefits, including early retirement, rose rapidly. In relation to total ceiling-restricted expenditures the costs for sick leave insurance and disability pensions increased from 11 per cent in 1997 to 15 per cent in 2003.

The new budget process with relatively small budget margins under the expenditure ceiling implies that expenditure forecasting over the short- and medium-term has become a high priority activity in the Government Office. Forecasting now plays a central role both during the budgeting phase and as a component of the mid-year monitoring activities.

A lot of political prestige has been invested in the expenditure ceiling. Furthermore, the budget act stipulates that the Government must act to prevent an overrun of the ceiling if there is a risk of such an overrun. Therefore, there has been both a strong political commitment and a legal commitment to comply with the ceilings. To cope with the ceilings the Government has in most years used its right to set maximum allowed expenditures below the amounts appropriated by the Parliament by using so-called limitation amounts. Because of the carry-over possibility that is applied to most appropriations in the Swedish budgetary system, the limitation amounts have carried forward expenditure from the current year to the next fiscal year. Hence, the limitation amounts have therefore not given rise to a permanent reduction of the expenditure level. They have, however, reduced the level of the budget margin in the next fiscal year and have therefore reduced the scope for expenditure
reforms or increased the need for budgetary retrenchments in that year.

On some occasions the government has also proposed permanent savings in, e.g. some transfer systems, to comply with the expenditure ceiling. Other measures can also be used. The Government has submitted proposals to the Parliament on exceptions from the normal rule that acquisition of assets of an infrastructural nature shall be financed by appropriations. Instead the Government has, in a few cases, proposed that acquisition of such assets shall be financed by loans in the National Debt Office. This means that accounting in relation to appropriations and the expenditure ceiling takes place in future years when the loans are amortized, and not in the fiscal year to which the investment expenditure relates. Hence, just like in the case with limitation amounts, loan-financed infrastructure projects tend to reduce the level of the budget margin in the coming fiscal years. The Government has also used tax expenditures or net budgeting of fees as a remedy when the expenditure ceilings have been threatened (see below).

Principles for the decisions on the expenditure ceilings

When the ceiling for the new third coming fiscal year is to be set, the previously decided expenditure ceilings for the first two years are maintained, unless very strong reasons justify modifications of the ceilings. So far, the ceilings have been maintained at the previously decided level, with the exception for some technical adjustments.15

Several factors are normally taken into consideration when the level of the expenditure ceiling is determined. One factor is that the expenditure ceiling affects the scope for tax reforms or the need for tax hikes over the medium-term. The desired level of future tax reforms should therefore be taken into consideration when the ceiling is proposed. Equation 1 illustrates the relation between the desired level of tax reforms for year \((t+3)\), \(\Delta T_{t+3}\), and the level of the expenditure ceiling, \(C_{t+3}\).

\[
C_{t+3} = R_{t+3} + \Delta T_{t+3} - S - O E_{t+3} + M
\]

where \(R_{t+3}\) denotes projected general government revenues assuming unchanged tax rules for year \((t+3)\), \(S\) is the desired structural level of general government net lending (2 per cent of the GDP), and \(O E_{t+3}\) is projected net expenditures outside the ceiling (mainly projected local government expenditures and interest on central government debt). The level of ceiling-restricted expenditures that are compatible with the planned tax measures then equals \(R_{t+3} + \Delta T_{t+3} - S - O E_{t+3}\). By adding an appropriate budget margin \((M)\) one obtains the desired level of the expenditure ceiling.

The difference between the maximum planned expenditure level that follows from the expenditure ceiling \((C_{t+3} - M = R_{t+3} + \Delta T_{t+3} - S - O E_{t+3})\) and a consequent assessment of how large expenditure will be for the coming third year (if measures already decided are implemented), then show the potential scope for expenditure reforms for that year.17 If this difference is negative there is instead a need for budgetary retrenchments on the expenditure side of the budget.

Hence, by choosing an appropriate level of the expenditure ceiling, a projected structural budget surplus in excess of 2 per cent of GDP can be divided between a scope for future desired tax reforms and a scope for future desired spending reforms. However, if the projected structural budget surplus is below 2 per cent of the GDP, the difference is then divided into expenditure retrenchments and tax boosts. A problem with the top-down method of determining the level of the expenditure ceiling in Eq. 1 is that it requires information on the
desired future tax reform and the budgetary impact of such reforms. Because of this problem the expenditure ceilings have also been determined on the basis of other factors and considerations. One is the relation between the expenditure ceiling and the GDP. As mentioned above, the expenditure ceiling has since year 2000 been set at an approximately constant level of the GDP. For a given level of the surplus target and local government expenditures this means that the government planned for an approximately constant level of the overall tax burden over time when the expenditure ceilings were determined. It has also been seen important to avoid a trend growth in the expenditure ratio during the current decade because of the future budgetary impact of ageing populations after year 2010.

PROBLEMS

A drawback with hard budget constraints is that they might encourage the use of dubious accounting practices, thereby reducing the degree of transparency in the government budget. Normally, such operations give the government some margin of flexibility in the implementation of the fiscal rule. In the case of Sweden, with a rule on the aggregate level of central government spending, the easiest way to circumvent the expenditure ceiling is to introduce net accounting or subsidies on the revenue side of the budget (tax expenditures).

As a rule, the Budget Act prescribes that the state budget shall, in principle, include all government revenue and expenditure, and that revenue and expenditure shall be entered gross in the state budget. However, the Parliament may decide on exceptions from these rules. This has occurred on a few occasions when the Government has been given authority to decide on the disposition of certain revenues from user-fees. This means that related expenses are no longer accounted for in the state budget. The effect of these operations on ceiling-restricted expenditures has, however, been relatively small and the proposals have been presented to the Parliament in a transparent way.

Another potential problem related to the expenditure ceiling is the use of tax expenditures. Tax expenditure exists if there is a deviation between the tax system and a certain benchmark or norm. In Sweden tax expenditure estimates have been published annually since 1996 in the Spring Fiscal Policy Bill. The report covers most types of taxes, for example, the national and the local personal income tax, the corporate income tax, social security contributions and most indirect taxes. More than 150 different tax expenditure items are included in the report. Currently, total reported tax expenditures amounts to about SEK 250 billion or about 8 per cent of GDP. Some of these tax expenditures are very close substitutes to ordinary expenditures, e.g. the so called employment support that is paid to local governments by crediting their tax accounts. Tax expenditures that can be directly compared to public expenditures amounted to about 0.4 per cent of GDP in 2005. Other tax expenditure items are less close substitutes to ordinary expenditure. Theoretically, proposals for new tax expenditure items, that take place after the level of the expenditure ceiling has been set, should be accompanied by a proposal for a downward technical adjustment of the ceiling. However, because of the varying degree of substitutability between tax expenditures and ordinary expenditures it is difficult to establish unambiguous rules for such technical adjustments. Hence, new tax expenditures have not usually been followed by a proposal for a technical adjustment of the expenditure ceiling. Small budget margins under the expenditure ceiling have led to increased pressure for tax expenditures. This pressure has, however, to some extent been held back by the surplus target.
Hard budget constraints might increase the temptation to present biased expenditure and revenue forecasts. By strategically manipulating the budget assumptions, the government can abide by the law and then have a list of explanations as to why the targets were missed ex-post. The risk of a political element in budget forecasting can probably be reduced if the government is committed to meet the fiscal rule both ex-post and ex-ante and if independent agencies outside the Government Office monitor the budget and produce independent budget forecasts. Currently there are three domestic bodies outside of the Government Office that monitor budget execution and produce independent short term and medium term forecasts of central government finances. Naturally, the Swedish public finances are also monitored by the EU Commission and the Council in the context of SGP. Since these forecasts are made public it may be hard for the Government to present budget forecasts that differ too much from the external forecasts without presenting a clear motivation for the deviation.

### THE FISCAL FRAMEWORK IN DIFFERENT CYCLICAL SITUATIONS

In the period after the expenditure ceilings were introduced in 1997 the Swedish economy roughly experienced a full business cycle. The period 1998–2000 included “good years” with an average growth rate of 3.8 per cent per annum and a positive output gap in 2000. On the contrary, the period 2001–2003 was economically weaker. The average GDP growth rate amounted to 1.5 per cent of the GDP with the largest negative output gap in 2003, approximately 1.5 per cent of the GDP. 2004 and 2005 were again years with higher growth, above 3.0 per cent on average. The profile of the cycle did not diverge much from those of most other countries in the European Union, although the average growth rate over the whole period was somewhat higher compared to the European average.

Below the expenditure ceilings and their coordination with the surplus targets in two different cyclical situations are discussed.

### Expenditures in the boom 1998–2000

In the period of “good years”, the expenditure ceilings constituted a distinct limit to spending. As was intended, the central government expenditure to GDP ratio fell by 2.5 per cent of the GDP between 1997 and 2000 and reached 32.4 per cent. Windfall gains generated by the buoyant cyclical upswing were directed towards the amortization of the central government debt, and to some extent, towards tax cuts. At the same time the surplus targets were easily met and in large the fiscal framework seemed robust and to function well. By setting limits on total expenditures the ceilings supported sound contra-cyclical policies. Doubtless, without the ceilings fiscal policy had been more expansionary. The framework was however not really tested due to an unusually favourable macroeconomic development.

In addition to a sustained growth and low unemployment in this period, inflation was moderate. On averages CPI rose by only 0.4 per cent per annum. Compared to the forecasts and projections in the Budget Bill for 1998, growth developed 1.0 per cent faster per annum and CPI-inflation turned out to be 1.3 per cent lower per annum. As several transfers in the Swedish system are indexed to the development of CPI (with a lag) low inflation mitigated the pressure on the ceilings. This development was also reinforced by the budget effects of declining unemployment. At the same time, budget margins reserved for cyclical effects on the budget in “bad times” were more or less fully used up. These margins appeared to be soft restrictions and constituted a weak
part of the framework. Altogether, there was room for discretionary, and to some extent permanent increases in non-cyclical expenditures. Examples were increased expenditures for education and research and economic security for families and children. The pressure on higher expenditures was, however, also reinforced by the substantial increase in expenditures for economic security in case of illness and disability, i.e. the sick leave insurance and early retirement schemes between 1998 and 1999 and after that their trend-wise growth up to 2003, see also Section 3.23

To sum up, expenditure ceilings contributed to contra-cyclical policies in this period by giving strict limits for total expenditures but there was also an embryo to pro-cyclical policies later on due to the failure to preserve budget margins for later periods when expansionary fiscal policies were needed.

The slowdown in 2001 to 2003

In the weak economic situation that lasted from 2001 through 2003, surpluses deteriorated from approximately 5 per cent of the GDP to just around balance. Roughly two thirds of the deterioration was contributed to discretionary fiscal policy measures and one third to automatic adjustments. In the first two years of the slowdown fiscal policy was strongly expansionary including both tax cuts amounting to approximately 2 per cent of the GDP and increased expenditures by around 1 per cent of the GDP. In 2003, the last year in the prolonged slowdown, the fiscal stance turned less expansionary and included only modest expenditure increases (0.2 per cent of the GDP).24

The pressure on the ceilings for cyclical reasons was not that hard in 2001 and in the election year 2002, but grew stronger in the two successive years. This reflects the lagged effect on expenditure of the low CPI-inflation in earlier years and that unemployment only increased late in the slowdown. In these years, there were two other distinct factors behind the pressure on the margins. First, as was mentioned above, active expansionary fiscal policy was substantial and was partly executed on the expenditure side of the budget. Major expenditure increases were directed towards increased child allowances, education and research, health care, schools and social services, the latter by increased grants to local governments. Most of these expenditure increases must be seen as permanent measures. Second, the costs for illness insurance and early retirement schemes grew rapidly in a trend-wise and non-cyclical way. It is also notable that expenditures related to labour market policy (a semi-automatic stabilizer) did not increase as could be expected in the slow-growing economy, not even in 2003 when unemployment clearly picked up. An interpretation could be that automatic stabilizers on the expenditure side of the budget where hampered by pressure on the ceilings by margins used up for other reasons.

The net lending surplus now shrank to close to balance as a result of automatic adjustments and active fiscal policy. Due to the prolonged slowdown it continued to stay below 2 per cent of the GDP both in actual and structural terms.

REFLECTIONS AND CONCLUSIONS

A first reflection is that the Swedish reform in the late 1990s was a typical example of how a severe economic and budgetary crisis made a reform necessary.

A general conclusion is that the nominal expenditure ceilings have functioned well. First, in the period 1997–2005, i.e. for nine years, the Government complied with the ceilings. The expenditure ceilings helped the Swedish Government eliminate its deficits and stabilize public finances. Between 1997 and
2005 the expenditure ceiling contributed to a fall in the general government expenditure ratio from 60.5 to 53.5 percent of the GDP. The new process with expenditure ceilings is also felt to have increased long-term thinking, because decisions on the expenditure ceilings are taken early in the process.

A further reflection is that the there might be some truth in the proposition that strict rules to some extent promote incentives to circumvent them. The Parliament has on some occasions decided on exceptions from the rule of gross accounting. The introduction of subsidies on the revenue side of the budget, the so called tax expenditures, could also be seen as a circumvention of the expenditure ceiling. These measures have however been relatively small in relation to the total expenditure level. Finally, a very important issue is the attitudes or values that the policy-making establishment holds towards public finances. Our interpretation of the development is that before the middle of the 1990s, rapidly expanding public expenditure, increasing tax ratio and substantial deficits were not perceived as major economic or policy problems by the political establishment. The threatening financial crisis of the central government in the beginning of the 1990s, however, made it obvious that the development and performance of our public finances did matter. The lesson learned was that a political majority is also subject to fundamental economic and financial laws. That lesson has not yet been forgotten.

Notes

1 This part draws on Hansson Brusewitz (2002) and Heeringa-Lindh (2001).

2 Molander (2000).

3 In the period 1997 to 2001, the ceiling for t+3 was approved by the Parliament in spring. Since 2002, it has been approved in November.

4 A motivation for including cyclically sensitive expenditures, too is that the transparency of the budget rule improves with a broad covering. The cyclical effects are intended to be taken care of by the so called budget margin.

5 Added to the targets on national level there is also a balanced budget requirement for local governments.

6 This has been the practice since the Budget for 2003. Earlier annual targets where set for the whole projected period of three years.

7 For more detailed presentations of assessments of long-term sustainability of Swedish public finances and their relation to the surplus target, see the Budget Bill for 2007, Appendix 2, “Sweden’s Economy” (chap 13) and the Swedish Convergence Programme 2006.

8 Empirical estimates show that the so called semi-elasticity measuring the budget sensitivity with respect to the output gap is approximately 0.7 while it is 0.5 on average in the EU15.

9 ESV is an authority which in its activities acts independently from the Government and the Ministry of Finance.

10 Annual targets have however been formulated as a floor for the surplus. That is for instance the case for the annual target in 2005.

11 The minor difference between the development of the ceiling to GDP ratio and the central government expenditure ratio according to the National Accounts depends mainly on the fact that certain central government expenditures are reported on the income side in the central government budget and in the National Debt Office’s net borrowing.

12 For most appropriations there is a carry-over possibility, which means that unused appropriations – within certain limits – can be carried forward to the next year. For most appropriations there is also a possibility to borrow against next year’s appropriation within certain limits. Such a credit is automatically deducted from the carry-over fund the following year.
To understand the principles for the decisions on the ceilings, see the Principles for the decisions on the expenditure ceilings.

This was however not the case for 2005 and 2006.

Such adjustments have been made several times due to policy changes that have affected the ceiling-restricted expenditures without affecting the consolidated expenditures of the general government sector. After the technical adjustment of the expenditure ceiling the margin between the new ceiling and ceiling-restricted expenditures should in principle be the same as before the change that gave rise to the adjustment.

When the level of the expenditure ceiling for the third coming year is to be determined, the output-gap is normally assumed to be approximately zero for that year. Hence, the tax forecast for year $t+3$ normally shows expected tax revenues collected at the potential level of GDP. This means that a calculation of the level of the expenditure ceiling made in accordance with Eq.1 is based on tax revenues obtained at the potential level of GDP. Higher tax revenues than expected due to a cyclical upturn (resulting in a positive output gap), will therefore be used to improve the budget balance (given that the expenditure ceiling is a more or less binding constraint).

This difference also equals the difference between the projected budget margin, which follows from the consequence assessment, and the contingency reserve.

Surpluses well above 2 percent in 2000 and 2001, however, gave room for tax cuts.

This is for instance discussed in Kopits (2001) and Milesi-Ferretti (2001).

In accordance with the generally accepted accounting practice in the Central Government’s Annual Report. In the Budget Bill for 2007 this type of tax expenditures is planned to be substantially reduced for the period 2007–2009.

Tax expenditures have also been discussed in Boije (2002).

The National Debt Office publishes forecasts of the central government’s borrowing requirement for the current year and the coming fiscal year. The National Financial Management Authority publishes medium-term forecasts of central government revenues and expenditures (as well as ceiling-restricted expenditures) about four times a year. The National Bureau of Economic Research quarterly publishes medium-term forecasts of central and general government net lending as well as forecasts of ceiling-restricted expenditures.

Spring Fiscal Policy Bill 2004

Sweden’s updated Convergence Programmes 2001 to 2004
Richard Emery

Fiscal procedures and institutions in the United States

This statement has been prepared for the Conference on Good Governance and Effective Partnership, organized by the Ministry of Finance of Hungary and the National Bank of Hungary. My comments will review fiscal discipline in the US and our experience with deficit based rules and expenditure rules. I will also provide an overview of transparency in the US budget process, focusing on the two institutions where I spent most of my professional career, the Office of Management and Budget (OMB) and the Congressional Budget Office (CBO).

OVERVIEW OF THE US BUDGET SYSTEM

The US budget process is different from most other OECD countries. The primary cause of the difference is the separation of powers established by the US constitution. In parliamentary systems, the government is supported by the majority party in parliament. A conflict over the budget could cause a government to fall. The US budget system is characterized by a strong Congress and by a system that creates conflict over the budget.

Political control over the budget is shared by two parties, the republicans and the democrats. The nature of the budget debate changes depending upon whether the party of the President controls one or both houses of the Congress. At the beginning of the Clinton Administration, the President, a democrat, had both a democratically controlled House and Senate to work with. He successfully pushed a major deficit reduction bill, cutting projected deficits by over $500 billion over five years. Not one republican voted for that proposal. For the last several years of the Clinton Administration, both the House and Senate were controlled by the republicans. The President stopped deep cuts in spending and stopped tax cuts proposed by the republicans by vetoing legislation.

In the US, first the Congress passes a budget resolution that establishes budget aggregates to guide subsequent bills. The budget resolution serves as a procedural constraint to legislative action on spending or tax proposals. Afterwards there is not a single budget bill. In contrast, the budget is enacted in 10 to 15 appropriations and numerous spending and tax bills. The President transmits a unified budget for the government.

Current operations of the US government are financed by 10 to 15 annual appropriations bills. Because this spending is determined annually, it is referred to as “discretionary” spending. Appropriations bills are organized by government agency or groups of agencies. The
Congress considers approximately 1,000 discretionary budget accounts and specifies funding for approximately 10,000 programs, projects and activities. For fiscal year 2007, the last Congress completed only two appropriations bills, funding the remainder of the government through an omnibus bill at prior year’s levels.

Over 60 percent of the Federal budget funds mandatory or entitlement programs. Eligibility for these programs is established in law. Benefits must be paid if a beneficiary meets the criteria established in law. Examples of entitlement programs are Social Security which provides income support to the elderly and Medicare, which provides health care for the elderly. To reduce the budget, the legislation authorizing the benefits must be amended. The remaining budget is controlled through annual appropriations bills, or is viewed as discretionary. In 1962, over 67 percent of the budget was discretionary. By 2012, just five years from now, mandatory spending is expected to grow to almost 70 percent of the federal budget.

Borrowing to cover deficits has not been a major issue to the US. US debt held by the public amounted to over $4.8 trillion by the end of fiscal 2006, 37 percent of GDP. That year the Federal government had a deficit of $248 billion. In 2007, the deficit was estimated to be $258 billion. While these are staggering amounts, financial markets have given US Treasury borrowing the best rates available. The reason for the good rates seems to be confidence in the US economy and the security that the US will redeem the debt.

FISCAL DISCIPLINE IN THE US

The structure of the US budget system was defined to a significant extent by the Constitution and its creation of a government with strict separation of powers. Since the constitution was ratified the budget system has been refined through a long history of innovation, periodically documented through additional changes in law. I would now like to briefly summarize the major changes.

Constitution: Section 9 of Article I of the Constitution provides that “No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law”.

Anti-Deficiency Act: To insure that the “power of the purse” remained with the Congress, in 1870 the Congress passed a bill to make it illegal for any government employee to obligate spending in excess of amounts provided in law. The “Anti-Deficiency Act” provided that no government agency may make expenditures during a fiscal year greater than provided by the law. It is this authority that OMB uses in execution of the budget. Agencies are required to apportion their appropriations by time or purpose to insure that they do not exceed the appropriated amounts. Violations of this law can lead to penalties ranging from minor disciplinary actions, loss of employment, fines or up to 2 years of imprisonment. Over half of the violations of the Anti-Deficiency Act occur in the Defense Department, due to the complexity of its finances rather than malfeasance. Most penalties involve reprimands, some reassignments of personnel or removal of personal. Few individuals have been criminally prosecuted.

Budget and Accounting Act of 1921

For the first one hundred and thirty years of the US history, there was no President’s budget. All spending was discretionary and balanced budgets were the norm, except in time of wars and recessions. Congressional committees
dealt directly with government agencies. The lack of a central focus for budgetary actions led to a fragmented action and no coherent strategy. In 1921, the Congress passed a bill requiring the President to transmit a budget for the entire government. The bill created the Bureau of the Budget in the Treasury Department, the predecessor to the current Office of Management and Budget. (OMB was moved to the newly created Executive Office of the President in 1939.) It also created the General Accounting Office, an investigatory agency of the Congress.

President's Commission on Budget Concepts

In 1967, President Johnson brought together a Commission to study the US budget system. The Commission’s most significant recommendation was that the budget of the United States should be comprehensive of all Federal government activities, including self-financed programs like Social Security.

Congressional Budget and Impoundment Control Act of 1974

After 1921 the balance of power between the Congress and the Executive shifted toward the President. The Congress considered the budget in separate actions on spending and tax bills, but did not take any action of the budget as a whole. President Nixon challenged Congress, by refusing to carry out laws providing for spending for programs he did not support. This refusal to spend was labeled as an “impoundment”. These two factors led in 1974 to passage of the Congressional Budget and Impoundment Control Act. This act:

- established procedures for promptly considering Presidential impoundments
- created House and Senate Committees on the Budget,
- established a requirement for concurrent resolution on the budget to set budget aggregates,
- created the Congressional Budget Office, and
- subjected spending more or cutting taxes to a legislative point-of-order.


The US budget system was modified by four separate legislative actions during the last several years of the twentieth century in attempts to bring unsustainable deficits under control.

- Gramm-Rudman-Hollings: In the mid-1980s the US was faced by projections of two hundred billion dollar deficits as far as the eye could see. In 1985, the Congress passed the Gramm-Rudman-Hollings Act (GRH), a deficit based fiscal rule. This legislation established absolute deficit targets, requiring annual reductions to produce a balanced budget in 5 years. The bill provided a $10 billion cushion, but beyond that amount subjected all spending to across-the-board cuts, a “Sequester”.

- Other than the $10 billion cushion, GRH made no provision for the effect of the economy on the budget. Its across-the-board cuts would punish the innocent, those who had taken difficult political actions to reduce the budget, as well as those who hadn’t.

- Within two years it was clear that the Congress could not reach the deficit target with politically acceptable cuts in government programs. GRH was amended to establish new less demanding targets.

- The original GRH required CBO and OMB to jointly determine whether the ceilings had been exceeded. The two agency’s estimates were averaged. The US Supreme Court deter-
mined that the determination of excess was an executive function that must be done by the Executive Branch of government. In 1987, CBO was removed from GRH enforcement.

Budget Enforcement Act

In 1990, the US adopted an alternative approach, an expenditure rule. After a protracted negotiation between the Legislative and Executive Branch budgeteers, the Budget Enforcement Act of 1990 (BEA) was enacted.

The BEA was designed to limit legislative action on the budget. It set limits or caps on “discretionary” budget authority and outlays, and established a pay-as-you-go (PAYGO) requirement for entitlement spending and revenues. Under PAYGO, an increase in entitlement spending or cut in taxes would have to be offset by a reduction in spending elsewhere or an increase in taxes. It was enforced by sequesters that applied only to the offending Congressional Committee. Lower-than-anticipated economic growth, poor technical estimates, or emergencies could not trigger a sequester.

The BEA was extended in 1993 and again in 1998. The discretionary limits established by the BEA expired in 2002. Since that time, the discretionary levels proposed in the President’s Budget, have functioned as de facto caps.

Current Outlook

From 1998 through 2001, the US budget was in surplus, reducing the incentive for politicians to agree to continuing fiscal constraint. The combination of the terrorist attacks of 2001, a downturn in the economy, and the wars in Afghanistan and Iraq, pushed the US budget into deficit. The budgetary goals of President Bush were to cut taxes and to hold non-security spending flat. The Democrats in Congress wanted higher discretionary spending and the end of tax cuts. These differences in budget policy have prevented agreement on new fiscal rules. Political differences also prevented any agreement on solutions to long-term budget problems resulting from the aging population.

Since the BEA expired, the only constraint to US deficits has been the lack of political agreement between the President and the democrats in Congress. Neither the President nor the Congress have had enough votes to be able to enact their budget policies.

The democratically controlled Congress has agreed to a budget resolution for 2008 that would increase discretionary spending. They have also agreed to impose a PAYGO constraint on legislation. This PAYGO constraint will make it difficult for the President to extend tax cuts that expire in 2010.

Lessons Learned From US Experience with Fiscal Rules: The deficit based rule, GRH did not work in the US. It didn’t work because it did not allow adjustments for changes in the economy. The expenditure rule, BEA, did work, until four years of surpluses undermined the political support for fiscal constraint.

Based on US experience, I would suggest the following parameters to fiscal rules:

• Legislated fiscal rules have greater force
• Reaching consensus on legislated rules forces political consensus
• Fiscal rules need simple comprehensive enforcement
• Fiscal rules can not substitute for political will.

US BUDGET IS TRANSPARENT

Two strong agencies: OMB for the Executive Branch and CBO for the Congress provide the US government, the Congress and the public with a substantial array of budget information.
fostering an informed debate on budgetary issues in the United States. The President's Budget and agency justification materials provide the Congress in depth information many perspectives of the US public finance. CBO produces substantial quantity and excellent quality reports, letters, and testimony on the budget. Additional information on the budget is available through the press, over the internet and from interest groups.

**Office of Management and Budget**

The Bureau of the Budget was established by the Budget and Accounting Act of 1921 to produce a comprehensive budget for the US. Originally established as part of the US Treasury, it was moved to the Executive Office of the President in 1939. BOB's name was changed in 1970, to recognize its broad government management functions. The majority of OMB's staff are career civil servants (470 of about 500), a permanent staff charged with supporting the Presidency. Approximately 30 OMB staff members are politically appointed by the current President. The OMB Director is a member of the President's cabinet and the inner circle of White House staff members.

**Congressional Budget Office (CBO)**

The Congressional Budget Office was created by the Congressional Budget Act of 1974 to provide the Budget and Appropriations Committees of the Congress with expertise to balance the Executive Branch's Office of Management and Budget. CBO has a staff of about 230 budget experts, virtually all of whom are non-partisan. The Director and Deputy Director are selected alternatingly by the Budget Committees of the House and the Senate.

**CBO is the scorekeeper for the Congress**

It develops an annual economic forecast, updated in mid-year. It formulates a budget “baseline” – policy neutral budget estimate -- against which it measures the cost of all legislation. It reviews the President's Budget and undertakes periodic analyses of budget issues, such as budget options for long-term health care.

**Economic Assumptions**

The Executive Branch has an informal group named the “Troika” which prepares its economic assumptions. The Troika consists of the Director of OMB, the Secretary of the Treasury and the Chairman of the President's Council of Economic Advisors. CBO economic assumptions are reviewed by a Panel of Economic Advisors including six former CBO Directors and 14 eminent economists from a broad spectrum of economic thought. CBO's economic assumptions tend to be a consensus forecast, in contrast with the Executive Branch's forecast, which reflects the optimistic bias that the Administration's program will have positive economic effects. Both CBO and OMB's assumptions tend to be close to each other. Their reports frequently contain tables showing comparisons between their assumptions.

**Role of the Federal Reserve**

The central bank of the United States, the Federal Reserve has no formal role in the US budget process. The Federal Reserve is an independent body and guards its independence carefully.

Traditionally the Fed Chairman has on-going informal relationships with the Secretary of the Treasury, the Chairman of the President's Council of Economic Advisors, and the Budget
Director. The chairman is consulted informally on his views on the economy prior to the Administration adopting its economic assumptions. Shortly prior to the release of the budget, the Budget Director provides the Chairman a briefing on its major policies. When the Chairman testifies before Congress, it is not uncommon for him to address fiscal policy issues such as the need to cut deficits or reform entitlement programs.

Role of Medium Term Economic Framework

The US government has used multi-year estimates for several budgetary purposes in the past. The top-down budget controls established in the 1980s and 1990s were written for five year periods. There is a current legal requirement for two year appropriations for the Defense Department. Not withstanding this requirement, the Congress has not enacted a two year appropriation. Government reformers continue to push bi-annual budgeting, without success.

Almost all tables in the US budget include estimates for the budget year, the current year and the prior year. The primary focus of the budget formulation process and appropriations action by the Congress is for one year. Detailed language is limited to one year, currently 2008. The Budget includes annual estimates for the budget year, plus four years and ten year totals for policy proposals affecting mandatory spending or revenues. These longer term estimates are provided because many of the policies take years to implement and the full cost is not known for several years.

Capital investment programs such as defense procurement, Energy research, and the National Aviation and Space Administration are planned for the life of the project. The budget includes five-year estimates of these costs.

The budget also includes long-range estimates for major entitlement programs. Seventy-five year estimates and infinite horizon estimates are provided for Social Security and Medicare and other retirement programs to capture the actuarial impact of program changes.

CBO’s Budget and Economic Outlook, Budget Options, Analytical studies and cost estimates all include annual estimates for five years, and ten year estimates. Long-term estimates are also presented for policy changes that have significant out-year affects.

The baseline

A current services or policy neutral baseline is used as a benchmark to measure the costs of policy proposals, both in presentations in the Budget and in CBO’s analyses. OMB develops a current services baseline for the President’s budget which is included in the Analytical Perspectives volume of the Budget. CBO prepares a comparable estimate that they use as a benchmark for cost estimates for pending legislation.

These estimates are developed using current law and current economic forecasts. Discretionary programs are adjusted for inflation. Some critics of baseline estimates assert that a nominal freeze is a more appropriate benchmark for discretionary programs. Others argue that discretionary programs should be adjusted for inflation and demographic changes.

Mandatory programs and revenues estimates reflect both demographic changes and economic assumptions.

The Budget Act excludes emergencies from the baseline, although some emergency needs will continue in the future. Funding for response to natural disasters does occur every year. Only the severity of the disaster and the level of Federal response are unknown. The costs of the war in Iraq have been excluded from budget controls by defining them to be emergency costs.
Budget Documents

The US Budget provides a large volume of information. The President’s Budget transmitted each February consists of four books, approximately 2,000 pages. It consists of:

- The Budget of the United States – a 200 page policy summary of the Budget introduced by a statement by the President,
- Analytical Perspectives – a compilation of special analyses on budgetary topics, for example a chapter on credit programs, another on capital investment, and another on the borrowing and debt,
- Budget Appendix – proposed appropriations language, financial tables, and explanatory materials for each of the 1,200 budget accounts,
- Historical Tables – tables presenting various perspectives of the budget, some back to 1789. Most tables begin in the 1940s.

In addition to the Budget books, the budget is available on-line and a detailed database supporting the budget is available. The on-line data includes the detailed performance and results assessments of each Federal program.

Agencies produce detailed justification materials for the Congress to support the President’s budget. For example, the Department of the Interior provides the Appropriations Committees nine volumes, each about 400 pages, of supporting materials for its budget request.

Major CBO Reports

CBO provides the Congress and the public an independent source of information on the budget. From its inception, CBO has placed great emphasis on the quality of the writing and the estimates in its reports. All of its reports are available on the internet.

<table>
<thead>
<tr>
<th>MAJOR CBO REPORTS</th>
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<tr>
<td><strong>Budget and Economic Outlook</strong></td>
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<tr>
<td><strong>Budget Options</strong></td>
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<tr>
<td><strong>Long-term Budget Outlook</strong></td>
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<tr>
<td><strong>Analysis of President’s Budget</strong></td>
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<tr>
<td><strong>Monthly Budget Reports</strong></td>
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<tr>
<td><strong>Analytical Studies</strong></td>
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</table>
Cost Estimates

The President's budget includes estimates of the costs of all of the President's proposals. CBO provides re-estimates of the President's proposals and provides estimates of the costs of every bill reported by the Congress. Its cost estimates include the five and ten year spending effects of the bill, an explanation of the basis of the estimate, and where appropriate, assessments of the intergovernmental or private sector mandates included in the bill. CBO also provides informal estimates at earlier stages in the legislative process, and may work with the Committee to propose changes in language to produce different budget effects. In 2006, CBO prepared over 600 formal cost estimates and approximately 1,000 estimates of unfunded mandates on States and local governments.

Relationship between OMB and CBO

OMB and CBO have a close working relationship. There are a significant number of staff members of each organization who have worked at the other organization. I worked at CBO for its first eleven years and at OMB for twenty two years. My predecessor at OMB left for CBO and my replacement at OMB had been CBO's Deputy Director. Moreover US legislation says that nobody shall hinder the free communication between the staff of the legislative and the executive.

Under the original GRH deficit control procedures, the average of OMB and CBO estimates were used to determine if the deficit ceilings were exceeded. OMB and CBO worked jointly with the staff of the Congressional budget committees to establish scoring rules to govern enforcement under both GRH and the BEA. The goal of these rules was to ensure that both score keeping agencies used the same scoring concepts to focus debate on differences in policy, rather than scoring differences.

The leaders of OMB and CBO work together to minimize differences between the agencies' estimates. Budget analysts from each agency also regularly work with their counterparts to ensure that they share common understandings of the budget implications of proposals. This close cooperation is intended to avoid differences based on interpretation while maintaining the independence of each agency's estimates.

Transparency Issues for the US: The US Budget is transparent thanks to the efforts of OMB and CBO and the volume of information provided to decision makers and the public. There are, however, several reasons for concern:

First, the US Budget is extremely complex. Complexity trumps transparency. Detail and volume of information are not sufficient to provide transparent budget information, if the average member of Congress or the public does not understand. The basic budget presentations may be too complex to be readily understood. Further effort should be given to simplifying budget information.

Providing inadequate information on performance of government programs reduces the transparency of public expenditure in the US.

Both OMB and CBO provide substantial budget information over the internet, but neither internet resource is user friendly. The information provided are copies of published documents and access to data bases, not information designed for the internet user. The budget in brief should be developed for the internet audience.

CONCLUSION

Good governance requires sound fiscal policy and an open budget process. The US experience may not be directly relevant to Hungary, but hopefully our successes and failures may provide insights that will be useful to you.
How did we get here: Hungarian budget 2000–2006

A step towards the comprehensive analysis of budgetary interactions**

Budget is an intricate system. It is quite probable that only few people would immediately comprehend how decreasing the support of pharmaceutical prices could cause the deterioration of the budget balance. Still, that is rather likely to happen, as decreasing supports mean increasing the consumer prices of medicines, which causes to increase the pensioner price index, which increases the Swiss index, which increases pension-related expenditures. Similarly, at a first glance, it is far from obvious how large an effect the freezing of public sector wages or the lifting of this freezing might make on of the budget deficit, as the effect of rise of gross wages is largely cushioned by a contrary change in tax and contribution revenues, whereas magnified by the increase of pension-related expenditures, the latter being again cushioned by the effect on the indirect tax revenues to some extent.

One basic condition of reforming our budgetary system is to have methods to forecast the effects of different external processes and of the measures of economic and social policy. With our analysis, we do hope to be of help regarding the assessment of the financial significance of different adjustment measures and reform efforts currently on the agenda, while, on the other hand, we intend our analysis to be regarded as a first step towards developing a general framework which is necessary for preparing budgetary impact analyses of a standard higher than those prepared currently.

Within the period of 16 years that has elapsed since the political and economic changes of 1990, it was in 2000 that our GDP-proportionate budgetary deficit was the nearest to the 3% Maastricht threshold, which suggested to us that we should compare the baseline situation in 2006 – that would have happened without the adjustment programme announced in June 2006 – to the budgetary situation in 2000, and attempt to review the history of the budgetary policy over the last few years based on the differences between the GDP-proportionate budgetary items of these two years. Analysing the recent history of Hungarian...
budgetary policy provides several lessons concerning the operation of the major budgetary mechanisms even if in a highly simplified form. The essential, direct aim of our analysis is to identify and to numerically weight the factors of the steep rise of the GDP-proportionate budgetary deficit and its impact mechanisms, preferably separating the impacts dependent on and independent from government measures.

Our analysis falls quite short of perfection in two crucial respects: firstly, we have no access to any macro fiscal models that could consistently tackle each essential impact chain, and, secondly, several data are unavailable in the necessary breakdown. Nevertheless, we think that — on the whole — the resulting outline does enable us to draw vital conclusions. The most we can hope for is that our study is to spark off a constructive debate in wider professional circles regarding the database, methods and conclusions of the analyses of the budgetary policy. The structure of the study is built in the following manner: Part 1 prepares us to carry out our analysis. We outline the most important data and the problems relating to the data, and filter out the one-off effects from the budget balances of the years 2000 and 2006 in order to clarify the real difference to be explained. In Part 2, we provide a detailed analysis of each group of factors, while Part 3 serves to summarise the results. As the most important precondition of any analysis of the budgetary policy is to have access to proper data, we present our own, unofficial database for all those interested in a separate Appendix. Naturally, we relied on officially published data wherever possible (as we carefully marked this); however, we are compelled to apply our own methods of approaches at several instances.

PREPARATION OF THE ANALYSIS

In a theoretically clear approach, we ought to have used data corresponding to the No Policy Change (NPC) scenario in respect of all budgetary items concerning 2006. We did not succeed in doing so in every case for different reasons. One of the most important inconsistencies originated in the fact that we did not have a detailed NPC based on which it would have been possible to break down the different impacts (e.g.: private vs. public sector GDP). This is partly due to the fact that we do not possess an appropriate macro model which can consistently tackle shifts and changes of such great proportions as yet.

Data and problems concerning the data

Below, we present a detailed account of the data that we used relating to specific areas. Generally speaking, it can be stated that we preferred to use accrual-based data and where such data was unavailable, we attempted to imitate the accrual-based approach by proportioning, on the basis of cash-based data.

The data table below presents important statistical time series, which we used regarding several items.

<table>
<thead>
<tr>
<th>I. Basic data</th>
<th>NATIONAL ACCOUNTS (billion HUF)</th>
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<tbody>
<tr>
<td></td>
<td>2000</td>
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<tr>
<td>Gross output at basic price</td>
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<tr>
<td>Companies</td>
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<tr>
<td>Intermediate consumption</td>
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<td>GDP at market price</td>
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<td>Government sector GDP</td>
<td>1 956.9</td>
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## II. Basic data

### COMPENSATION OF EMPLOYEES

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<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
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<th>2006</th>
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<tr>
<td>Compensation of employees</td>
<td>5 832.5</td>
<td>6 853.4</td>
<td>7 775.5</td>
<td>8 663.9</td>
<td>9 500.4</td>
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<td>1 690.6</td>
<td>2 098.5</td>
<td>2 488.4</td>
<td>2 614.1</td>
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<tr>
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<td>5 677.0</td>
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<td>Taxes and contributions on labour</td>
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<td>3 050.7</td>
<td>3 456.0</td>
<td>3 644.6</td>
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<td>1 793.8</td>
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<td>Government sector</td>
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<td>Private sector</td>
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<td>5 887.4</td>
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<td>Contributions paid by employees, and personal income tax</td>
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<td>1 440.8</td>
<td>1 662.2</td>
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<td>Revenues from employer's contributions to the Labour market fund</td>
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(continued from the previous page)

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<td><strong>Employee’s pension and health care contributions</strong> (social security)</td>
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<td>115.3</td>
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<td>Government sector</td>
<td>288.6</td>
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<td><strong>Employee’s wages and salaries, government sector, without personal income tax and contributions</strong></td>
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<td></td>
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<tr>
<td>Government sector</td>
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<td>4 574.3</td>
<td>4 953.0</td>
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</table>

* Compensation of employees in the government sector, based on National accounts (D.1), concerning 2006: Convergence Programme
**Employees’ wages and salaries without personal income tax and contributions
***Employees’ wages and salaries, government sector, without personal income tax and contributions
****Employees’ wages and salaries, private sector, without personal income tax and contributions

### III. Basic data

#### OTHER INCOMES OF HOUSEHOLDS

(billion HUF)

<table>
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<tr>
<th></th>
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<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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<td>Pension expenditures</td>
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<td>Family supports</td>
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<td>346.1</td>
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<td>386.6</td>
<td>406.2</td>
<td>484.0</td>
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<td>Housing subsidies</td>
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<td>65.9</td>
<td>89.5</td>
<td>168.4</td>
<td>225.7</td>
<td>273.6</td>
<td>244.6</td>
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<tr>
<td>Other supports</td>
<td>169.9</td>
<td>167.0</td>
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<td>74.0</td>
<td>59.0</td>
<td>49.1</td>
<td>207.5</td>
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<tr>
<td>Property income</td>
<td>579.2</td>
<td>574.2</td>
<td>629.3</td>
<td>535.9</td>
<td>668.2</td>
<td>750.0</td>
<td>700.0</td>
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<tr>
<td>Mixed incomes and operating surplus (use of flats by owners)</td>
<td>2 414.6</td>
<td>2 721.5</td>
<td>2 848.4</td>
<td>2 931.8</td>
<td>3 162.9</td>
<td>3 261.9</td>
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<td>Other incomes and error (on a residual basis)</td>
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<td>–211.8</td>
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### IV. Basic data

#### THE RELATION OF DISPOSABLE INCOMES AND FINAL CONSUMPTION OF HOUSEHOLDS

(billion HUF)

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<th>2005</th>
<th>2006</th>
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<tbody>
<tr>
<td>Disposable incomes (non-adjusted)</td>
<td>7 926.3</td>
<td>9 122.3</td>
<td>10 168.1</td>
<td>11 072.7</td>
<td>12 246.4</td>
<td>13 562.1</td>
<td>13 729.2</td>
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<td>Pecuniary disposable incomes (non-adjusted)</td>
<td>7 112.3</td>
<td>8 292.2</td>
<td>9 320.7</td>
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<td>12 639.6</td>
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<td>Household final consumption expenditure at market price</td>
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<td>12 240.4</td>
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<td>Excise duty, consumption tax and vehicle registration tax</td>
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<td>108.6</td>
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<td>178.4</td>
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<td>209.4</td>
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<td>7 200.8</td>
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### V. Basic data

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<th>COMPANIES</th>
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<td>Operating surplus of the business sector</td>
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<td>Corporate tax</td>
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### VI. Basic data

<table>
<thead>
<tr>
<th>NUMBER OF EMPLOYEES AND PENSIONERS</th>
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<td>2001</td>
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<td>Employment *</td>
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<td>Government sector **</td>
<td>791.4</td>
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<td>Private sector **</td>
<td>3,064.8</td>
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<td>out of which: employed according to the Hungarian Central Statistical Office ***</td>
<td>1,891.7</td>
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<tr>
<td>Number of pensioners</td>
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</table>

* Those employed (from 15–74 year-old population)  
** Government sector: number of those employed, central budget  
Private sector: total employment minus employment in the government sector  
*** In a publication of the Hungarian Central Statistical Office (“Number and incomes in the national economy”) private sector

### VII. Basic data

<table>
<thead>
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<th>SPECIFIC INDICATORS</th>
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<tr>
<td>2000</td>
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<td>Average gross wage income (from budget figures)</td>
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<td>Government sector</td>
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<tr>
<td>Private sector</td>
</tr>
<tr>
<td>Average net wage income (from budget figures)</td>
</tr>
<tr>
<td>Government sector</td>
</tr>
<tr>
<td>Private sector</td>
</tr>
<tr>
<td>Average gross earnings (from Hungarian Central Statistical Office), previous year = 100</td>
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<tr>
<td>Government sector</td>
</tr>
<tr>
<td>Private sector</td>
</tr>
<tr>
<td>Average net earnings (from Hungarian Central Statistical Office), previous year = 100</td>
</tr>
<tr>
<td>Government sector</td>
</tr>
<tr>
<td>Private sector</td>
</tr>
<tr>
<td>Total net earnings (from Hungarian Central Statistical Office), previous year = 100</td>
</tr>
<tr>
<td>Government sector</td>
</tr>
<tr>
<td>Private sector</td>
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</tbody>
</table>
We deem it vital to carefully present the data that we used because several differently compiled statistics exist for the variables that are important in respect of the subject matter of our analysis. The reason for this may be data errors as well as differences in sampling techniques. The data on net wages, used in our calculation, significantly differs from what the statistics of the Hungarian Central Statistical Office on headcount and incomes suggest. We assess the significance of this in the Appendix on the data in more detail. In view of data quality, our calculation sometimes fails to be as consistent as the importance of the theory and the subject matter would necessitate it. Nonetheless, it appears to us that we have found the best (or least bad) solution when choosing between alternative statistics. Notwithstanding, naturally, we are open to debates.

Data errors may have a part in the sometimes high values of “other” factors, which appear in relation to explanatory factors and stay partly unexplained.

Regarding 2006, we applied estimates that had been prepared based on different sources of data. Generally speaking, we attempted to present estimates in relation to a case which leaves the introduction of the adjustment package out of consideration.1 It does result in some inconsistency that the macroeconomic data for 2006 upon which we based our analysis reflect the state of affairs after the adjustment measures.

Filtering out one off effects and additionality criterion

Identifying structural problems may be made difficult by the effects of business cycles and different one-off factors. Fortunately, in this case it is not necessary to filter out the effect of business cycles, as the output gaps are identical – with a good approximation – in the two years to be compared, based on the production function based cyclical adjustment method.2

We regard the following as one-off effects
• motorway constructions,
• the cancelation of certain claims (e.g. the cancellation of the Iraqi debt in 2006),
• flood-related expenditures exceeding many years' averages,
• increased deficits of local governments which – in general – could be tracked back to election years,
• outstandingly high items due to the peculiar statistical accounting of the purchase of the Gripen fighter planes.

We deem the developmental expenditures prescribed by the so-called additionality criterion similar to the one-off effects. The additionality criterion as a restraint on the budgetary policy, which appeared when Hungary joined the EU in 2004, specifies that Member States shall not use EU funds to substitute for existing developmental expenditures. Based on our calculations, the one-off items and the additionality requirement (or rather, the lack of these) together explain approximately 0.3 percentage point of the GDP-proportionate budget deficit of 2000, while the same effect amounts to 2.6 percentage points in 2006.

As Table 1 shows, the adjustments concern motorway constructions both in 2006 and 2000. In 2000, the implementation of these projects was still mainly financed by the National Motorway Company (NA Rt.), but
as the National Motorway Company belongs to the ESA circle, the 2000 ESA deficit figure includes this item. The expenditures relating to local governments and floods exceeded the average both in 2000 and 2006. However, the Iraqi debt cancellation had no counterpart in 2000. Regarding the Gripen-related expenditures, we divided the total of the payment period between 2001 and 2016 in proportion of “airplane time”, i.e. we took into account 7 fighter planes in 2006, and 14 fighter planes per year between 2007 and 2015 (i.e. a total of 133 of them), and found out which amount, evenly paid after these 133 “airplane years” would equal the original total expenditure. We multiplied the figure calculated in this manner by 7 or 14 depending on the year in question. Following this method, we worked out the “actual” (naturally only estimated) service values between 2006 and 2015. We considered the divergences of these from the actual payments to be one-off expenditures.3

The additionality criterion means that the EU is examining whether Hungary spent more or less on certain developmental objectives in the years subsequent to the EU accession in comparison with the average of the base period (1999–2001), taking the 2004–2006 average into account. The expenditures considered to be developmental expenditures are shown in Table 1 in the Appendix. However, to ensure the consistency of our calculations, it is necessary to deduct here the expenses of the construction of motorways since we have already taken them into account among one-off factors. Similarly, it is necessary to deduct wage-type developmental expenditures relevant among additionality criterion as we wish to analyse wages in the government sector separately. Agriculture-related developmental expenditures also need to be deducted as we are going to tackle agriculture-related developmental expenditures within the framework of the budgetary relations established with the EU.

### Table 1

<table>
<thead>
<tr>
<th>ONE-OFF EFFECTS, AND DEVELOPMENTAL EXPENDITURES (billion HUF)</th>
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<th>2001</th>
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<th>2004</th>
<th>2005</th>
<th>2006</th>
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</thead>
<tbody>
<tr>
<td>One-off factors, total A</td>
<td>–39.9</td>
<td>–66.4</td>
<td>–365.7</td>
<td>–12.7</td>
<td>–129.0</td>
<td>–220.3</td>
<td>–417.5</td>
</tr>
<tr>
<td>Net lending/borrowing of local governments, divergence from the average*</td>
<td>11.3</td>
<td>67.0</td>
<td>–88.1</td>
<td>36.3</td>
<td>27.5</td>
<td>–39.2</td>
<td>–37.0</td>
</tr>
<tr>
<td>Net lending/borrowing of by local governments</td>
<td>–38.4</td>
<td>10.9</td>
<td>–151.3</td>
<td>–33.3</td>
<td>–48.6</td>
<td>–120.1</td>
<td>–123.6</td>
</tr>
<tr>
<td>Flood-related expenditures, divergence from the average*</td>
<td>–24.9</td>
<td>–8.0</td>
<td>–1.5</td>
<td>15.5</td>
<td>22.3</td>
<td>23.9</td>
<td>–12.5</td>
</tr>
<tr>
<td>Expenditures relating to flood protection in the budget</td>
<td>52.9</td>
<td>39.6</td>
<td>37.1</td>
<td>23.6</td>
<td>20.5</td>
<td>21.7</td>
<td>61.3</td>
</tr>
<tr>
<td>Construction of motorways, excluding availability fees</td>
<td>–26.3</td>
<td>–125.4</td>
<td>–276.1</td>
<td>–64.5</td>
<td>–178.8</td>
<td>–205.0</td>
<td>–252.2</td>
</tr>
<tr>
<td>Cancellation of claims (cancellation of Iraqi debt in 2006)</td>
<td>–40.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gripen-related expenditures, exceeding the average</td>
<td>–75.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developmental policy; total B</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>131.6</td>
<td>147.2</td>
<td>–194.1</td>
</tr>
<tr>
<td>Additionality criterion (excluding wage expenditures, agriculture-related items and motorways)</td>
<td>131.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (A+B)</td>
<td>–39.9</td>
<td>–66.4</td>
<td>–365.7</td>
<td>–12.7</td>
<td>2.6</td>
<td>–73.2</td>
<td>–611.6</td>
</tr>
<tr>
<td>ESA-deficit (D)</td>
<td>396.8</td>
<td>627.7</td>
<td>1540.5</td>
<td>1364.9</td>
<td>1337.7</td>
<td>1719.0</td>
<td>2736.4</td>
</tr>
<tr>
<td>Adjusted ESA-deficit [ = D + (A+B)]</td>
<td>356.9</td>
<td>561.3</td>
<td>1174.8</td>
<td>1352.3</td>
<td>1340.4</td>
<td>1645.9</td>
<td>2124.8</td>
</tr>
</tbody>
</table>

*Direction of the correction of ESA-95 deficit: + = enhance ESA-95 deficit, – = decrease ESA-95 deficit.
All through the years 2004–2006, the expenses of motorway constructions had a part in increasing the level of the budget deficit, to which it was added the rising of other relevant expenditures in respect of the additionality criterion.

**DETAILED ANALYSIS**

Let us go through an itemized list of budget revenues and expenditures with significantly changed GDP-proportionate levels in the period 2000–2006. Our starting point for each item was the year 2000 nominal level and we examined the factors that could explain the higher nominal levels in years prior to 2006. Throughout this analysis, we indicate as our reference point (baseline scenario) the extent of nominal increase that could have been facilitated by maintaining the year 2000 GDP-proportionate ratio. Accordingly, data for year 2000 are defined as zero throughout the graphical illustration.

We have simplified budgetary connections to additions and multiplications so as to be able to break down the changes in the items measured as percentages of GDP into additive factors. Wherever the total impact comes as the product of multiplying two or more factors (for example the debt portfolio and the interest rate), the total impact was split in proportion to logarithms. The advantage of this breakdown is that it will be realized as an identity in all cases, therefore it unambiguously and completely distributes the absolute amount of the change (in HUF amount) among product factors; while it does not depend on the sequence of factors (as opposed to the partial effects based approach, where the impact of a single factor is measured at the constancy of the others). However, there is a disadvantage: a meaningful sequence that could rank the different factors in certain cases will thus be ignored. Let us present these relations for those who prefer mathematical formulas to narratives. The following keys are used:

As a key sing:

- $W$: households’ income (billion HUF)
- $w$: households’ income (HUF/prs)
- $N$: headcount (prs)
- $T$: tax revenue
- $\tau$: tax rate
- $\pi$: price index

Superscript indicates the sector:
- $p$: private sector
- $g$: government sector
- $r$: retired people

Subscript indicates the item type:
- $g$: gross
- $n$: net
- $w$: burdening income from work
- $c$: burdening consumption
- $p$: burdening profit

Some other keys are identified as they emerge.

### Incomes Received From the State

There are three main forms of incomes received from the state: wages of those employed in the government sector, subsidies and price supports that increase private individuals’ disposable income.

From among subsidies that increase disposable income, pensions (including disability pension) and family support are worth of special attention. Any form of subsidizing medicines, energy, public transport and housing are listed among price supports.

### Wages in the Government Sector

**INFLUENCING FACTORS**

There are two ways of breaking down the per-employee wages paid in the private sector. Firstly, it can be broken down to the product of multiplying the per-employee real added
value by the nominal unit labour cost, or alternatively it can be broken down to the product of multiplying per-employee nominal added value (hereinafter: productivity) by the real unit wage cost (extra intentional wage increase). Since the concept of 'unit wage cost' is more applicable in corporate decision-making, economic analyses tend to prefer this breakdown. Nevertheless, we will use the 'productivity + extra wage rise' breakdown, since we wish to analyse the ratio of budget items to the nominal GDP rather than the rate of inflation.

It is supposed that in case of a long-term stable growth, gross wages in the private sector will follow the nominal added value calculated at basic price, and the relative wages paid in the government sector will adjust to wages paid in the private sector.

Since wages paid in the public sector are based on conscious political decisions, the question of demonstration effect might arise. In our opinion, in the given period, the changes in the wages paid in the private sector cannot be unequivocally interpreted as the demonstration effect of wage increases in the public sector, since:

1. the rate of wage increases in the government sector was known in advance in each year, still wages in the private sector increased by one or two years’ delay only, what is more, it happened together with a streamlining in the public sphere.
2. in the 1990s, wages in the public sector significantly lagged behind wages of the private sector (the relative lag of wages hit 30% in the public sector in 2000), so there was no considerable demonstration effect – at least not in the 'slowing' direction.
3. relative wage changes in neither direction generated significant regrouping of employees.

The Figure 1 indicates the development of

---

<table>
<thead>
<tr>
<th>Real added value/prs</th>
<th>Real added value/prs</th>
<th>Nominal added value/prs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real unit labour cost</td>
<td>Inflation</td>
<td>Real unit labour cost</td>
</tr>
</tbody>
</table>

WAGE SHARE IN PUBLIC AND PRIVATE SPHERES

![Figure 1](data:image/png;base64,)<br>

Government sector (scale on the right)  Private sphere (scale on the left)
the employee earnings/nominal added value ratio in the government and private sectors:

The changes in the government sector’s net wages are split up into four factors:

• wage rise corresponding to the nominal productivity improvement of the private sector,
• number of employees,
• extra wage rise and
• change in average effective tax and contribution rate on labour income.

As expressed by the formula:

\[ W_{g}^{n} = (1 - \tau_{w}) \omega_{g}^{x} N^{g} \eta \omega_{g,2000} \]

where

- \( W_{g}^{n} \): net wage expenditures in the government sector,
- \( \tau_{w} \): effective average tax and contribution rate on labour income,
- \( \omega_{g}^{x} \): government wage increase above the private sector's productivity (2000=100),
- \( N^{g} \): number of employees in the government sector,
- \( \eta \): per-employee nominal added value without the non-market activity of households in the private sector (nominal GDP/employee without non-market activity of households calculated at basic price, 2000=100),
- \( \omega_{g,2000} \): average gross wage income in the government sector in 2000.

**Findings**

*Figure 2* indicates that the per-employee growth of nominal added value calculated at basic price in the private sector exceeded the pace of GDP growth counted at market price.

The government increased the wages of civil servants in 2001 and in 2003, and those of the public servants in 2002 and in 2003 by a rate that significantly exceeded the private sector’s productivity increase. There was a slight correction of it in 2004, thus the cumulative effect reached HUF 113 billion or 0.5% of the GDP by 2006.

The growth in the number of the public sphere’s employees was considerable in 2002-2003, but the former excess practically vanished in the period 2004–2006 (prior to the announcement of the lay-off measures in the adjustment package of 2006), and thus the impact of the increase in the government sector headcount in the deficit surplus that emerged by 2006 is negligible.

Tax and contribution cuts played the most important role in the growth of the GDP-proportionate net wage expenditure in the government sector. The resulting loss in the central budget’s income was nearing HUF 180 billion or 0.8% of the GDP in 2006.7

**Pensions**

*Influencing factors*

Any change in pensions is chiefly determined by the ‘Swiss indexing’, which contains half of the national economy-level average of net wage rises and half of pensioners’ consumer price index.8 Net wages obviously contain the wages of both the private and the public sectors; as a result, their increase by more than the nominal GDP also lifts the GDP-proportionate level of pensions-related expenditure. Lacking certain data and an adequate model, in a considerably simplified manner, we regard inflation here as an external condition: therefore the impact of wages, taxes and administrative prices on inflation pensions are not analysed.

There were multiple instances of pension increases exceeding the Swiss index in the period under review. In 2002, a HUF 19,000 amount paid for each pensioner directly increased pensions-related expenditure, but that was only a one-off bonus, thus it did not directly impact the deficit in 2006.9 However, the ‘extraordinary’ increases in pensions carried out in 2001 and in 2002 were included in the base of the subsequent years, and in the four years between 2003 and 2006 the ‘13th-month pensions’ gradually emerged: instead of the ear-
lier 52 weeks of pension, retired people received it for 53 weeks in 2003, for 54 weeks in 2004, for 55 weeks in 2005, and for 56 weeks beginning from 2006.

The number of pensioners slightly reduced in the six years under review, but the 'rotational effect' – the main point of which is that the pensions of the deceased are considerably lower on the average than those of the freshly retired ones – significantly lifted this expenditure.

The following formula specifies the range of expenditures relating to pensions:

\[ W^r = N^r \omega^r_s \omega^r_{13} \omega^r_{pol} \omega^r_{2000} + W^r_{X,2002} \]

where

- \( W^r \): total pension payment,
- \( W^r_{X,2002} \): one-off bonus of HUF 19,000 in 2002,
- \( \omega^r_s \): average gross earnings in the public sphere,
- \( \omega^r_{13} \): average gross earnings in the private sphere,
- \( N^p \): number of employees in the public sphere,
- \( N^p \): number of employees in the private sphere,
- \( N^r \): number of pensioners,
- \( Z^r_s \): Swiss index,
- \( Z^r_{13} \): impact of introducing 13th-month pension,
- \( Z^r_{pol} \): impact of (extraordinary) raises to be built into the base, above the Swiss index,
- \( \omega^r_{pol} \): rotational effect (as a residue),
- \( \tau_{pol} \): pensioners’ consumer price index,
- \( \omega^r_{tax} \): average tax and contribution rate on labour income.

\[ W^r = N^r \omega^r_s \omega^r_{13} \omega^r_{pol} \omega^r_{2000} + W^r_{X,2002} \]

### FINDINGS

The ratio of pensions-related expenditure to the GDP increased by about 1.5 percentage
points in the period under review. Figure 3 illustrates that this rate would have returned to the level seen in 2000, if both the public and the private sectors had increased wages just at the rate that is justifiable by productivity and if both inflation and the rotational effect actually changed as observed (i.e.: ignoring the effect of extra wage rises on inflation and on newly retired people’s pension) and if there had been no extraordinary increases in pensions.

At this point, the number of pensioners did not pay a significant role (reducing impact is – 0.1 percentage points) and the impact of the extra wage increase in the private sector was also below 0.1 percentage points.

The government’s measures almost wholly explain the rise in GDP-proportionate expenditures relating to pensions: cutting taxes and contributions on labour income a (0.1 percentage points), the extra increase in the governmental wages (0.2 percentage points), lifting pensions above the rate of the Swiss index (0.5 percentage points) and introducing the 13th month pension (0.5 percentage points).

When selecting the calculation method, the interaction of the political measures and the exogenous factors should be taken into account (for example, the effect of the 13th month pension is based on a higher pension level because until 2002 there were higher rises than the obligatory one in line with the Swiss index). The impact of the 13th month pension appears to be much smaller than the amount paid in 2006 under this appropriation (HUF 170 billion), which is the result of the fact that the base of the 13th month pension was increased not just by Swiss indexing but also by extraordinary increases as well as by the rotational effect. At this point, the usage of the logarithmic breakdown that ignores the sequence of events, is debatable, since theoretically politics was aware of the characteristics of the pension system (the majority of rises beyond the Swiss index took place before 2002 and the rotational effect is
also a well-known fact), when decided to introduce the 13th month pension. The viewpoint that in 2006 the total amount paid for the 13th month pensions was a consequence of the measure to introduce the 13th month pension can be defended accordingly.

Wage increases and reducing tax and contribution rate on labour income in the public sphere lift the Swiss index through the net wages and thus they increase pensions, too. We assumed that extraordinary increases above the Swiss index that are based on political decisions would not have been smaller if net wages had increased slower. In other words, our starting point was that politics wanted to improve the position of retired people against net wage increase by a fixed-percentage rise. That is to say the stronger the net wage increase is, the higher this extra pension rise, based on political decision is. This solution is reasonable because in the political public discourse, pensions are most frequently compared with current wage increases, and factors beyond the wage increase are not analyzed.

As we have indicated earlier, we could not give a sufficiently deep analysis of economic policy’s impacts on inflation. Nevertheless, we have prepared an estimate to what extent the government’s measures affected pensions-related expenditures through the Swiss index’s inflation component, abstracting from the effect of wages on inflation. Because of administrative price increases after 2000 and tax measures after 2004, the extra inflation lifted pensions-related expenditures by HUF 24 billion in 2006. (See Table 2)

Please note that our calculations indicate the gross impact of politically motivated increases in pensions on budgetary expenditures. Because of the higher disposable income due to increased pensions, and the resulting extra consumption and extra tax-revenue, the decisions’ impact on the deficit is smaller than shown above. Our analysis into consumption taxes tackles this correlation in detail.

**Family supports**

**INFLUENCING FACTORS**

In the period under review, the central budget subsidized families through the tax allowances available for families in the personal income system, and in the form of direct family support payments (family allowance, maternity allowance, child benefit etc.). The total subsidy is the sum of these two.

**FINDINGS**

As indicated in Figure 4, it was the growth in personal income tax allowances for families in 2001–2002 that resulted in the increase in family supports’ GDP-proportionate level. However, it was the new government that lifted the amount of family allowance in 2003. The total amount of family supports reduced in 2004 and it remained steady GDP-proportionately in 2005, but it grew again in 2006 as a result of the intensive rise in

**Table 2**

<table>
<thead>
<tr>
<th>IMPACT OF INFLATION</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of inflation, annual</td>
<td>52.6</td>
<td>35.2</td>
<td>36.8</td>
<td>63.7</td>
<td>37.3</td>
<td>39.2</td>
</tr>
<tr>
<td>market</td>
<td>52.4</td>
<td>34.8</td>
<td>36.4</td>
<td>33.8</td>
<td>26.3</td>
<td>57.1</td>
</tr>
<tr>
<td>state measures, direct impact</td>
<td>0.2</td>
<td>0.4</td>
<td>0.4</td>
<td>29.9</td>
<td>11.0</td>
<td>-17.9</td>
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<tr>
<td>Impact of inflation, cumulated</td>
<td>52.6</td>
<td>87.8</td>
<td>124.6</td>
<td>188.3</td>
<td>225.6</td>
<td>264.8</td>
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<tr>
<td>market</td>
<td>52.4</td>
<td>87.2</td>
<td>123.6</td>
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<td>0.2</td>
<td>0.6</td>
<td>0.9</td>
<td>30.8</td>
<td>41.8</td>
<td>23.9</td>
</tr>
</tbody>
</table>
family allowance, which increase surpassed the amount of the practically ceased tax allowance. There was a nearly 0.2-percentage-point growth in the GDP-proportionate amount of family supports in the six years under review.

**Drug subsidies**

**INFLUENCING FACTORS**

The budget’s expenditures under drug subsidy depend on both the nominal value of drugs purchased by people (pharmaceutical consumption) and on the rate of subsidy within that. Unfortunately we could not analyze three important effects: the shift in pharmaceutical consumption in favour of imported pharmaceuticals, the price increase of imported pharmaceuticals and the impact of the state (national health insurance) regulation of drug prescription on the demand.

We refer – without showing data – only to the fact that pharmaceutical prices grew above the rate of inflation in this period, which lifted the nominal value of pharmaceutical consumption, whereas no significant volume increase was observed based on the data available (e.g. number of packets). It seems that the reason for the rise seen in average prices is chiefly not the producer price of the medicines produced in Hungary, but the increase in the weight of imported pharmaceuticals and their higher price that follows the HUF exchange rate.

**FINDINGS**

The state’s GDP-proportionate pharmaceutical expenditures increased by 0.5 percentage points by 2006. (See: Figure 5) Basically, it was the higher total pharmaceutical consumption expenditure that augmented the central budget’s pharmaceutical expenditure, rather than an increase in the rate of state subsidies. There seemed to be savings in state subsidies at the beginning of this period, and then in 2006 – according to the forecast prepared prior to the adjustment programme announced in the summer – slight savings re-appeared. More significant savings on state subsidies could have been realized only if the state had gradually quitted the support of pharmaceuticals’ consumption,
which would have slowed down the growth of the quantity purchased through an increase in the consumer price, resulting in additional budgetary savings.

**Housing subsidy expenditures**

**INFLUENCING FACTORS**

Between 2000 and 2006, the government granted housing subsidies under as many as 21 titles. For a better understanding, these titles are grouped into three categories.

- **Subsidies with significant lagging effects**
  
  There is certain inertia in the growth of the expenditures, as the budget is burdened by serious past commitments.
  
  *Types:* loan interest subsidies for the purchase of new or second-hand homes, for local government loans related to water utilities and home renovations, and subsidies for building society savings.

- **Subsidies without significant lagging effects**
  
  In principle, the government would be able to terminate these subsidies in any year.
  
  *Types:* social housing subsidy for building a home, young people’s home building support, tax refund subsidy, panel block reconstruction subsidy, subsidy to physically disabled people, personal income tax allowance on housing loan repayments.11

- **Subsidy forms ending in the examined period**
  
  The GDP-proportionate increase in subsidies of category 2 is fully attributed to government intention in the period. The decrease in payments in category 3 was an external condition in the period from 2000 to 2006, as the subsidy forms of this category were terminated as a result of earlier decisions.

Category 1 shows a mixed picture, as it was partly influenced by government decisions, but the burden of debt stock accumulated earlier or exogenously is also significant, and this is influenced by the effects of the development of the interest rates (monetary policy).

The development of the annual amounts of the various housing subsidies in HUF between 2000 and 2006 is determined by the following simple formula:

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**Figure 5**

**DRUG SUBSIDY**

Nominal accumulated growth compared to the year 2000 level

*Note:* see Appendix C for exact data

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11. The analysis of the effect of the subsidy on the development of drugs, particularly on the price of drugs, is beyond the scope of this survey.
\[ H = \sum H_i + \left( T_{16} + \sum H_i \right) + \sum H_{out} \]

where
- \( H \): housing subsidies,
- \( H_i \): subsidies with significant spreading effects,
- \( T_{16} \): personal income tax benefit on housing loan repayments,
- \( H_i \): subsidies without significant spreading effects,
- \( H_{out} \): expiring subsidies,

**RESULTS**

Category 1 increased the deficit by 0.6 percentage points and category 2 increased it by 0.1 percentage points, while category 3 caused a decrease of 0.1 percentage points. (See Figure 6)

With unchanged interest rates, the increase in category 1 would have been even higher, 0.1 percentage points. According to our calculations (see appendix C), within the GDP-proportionate 0.6 percentage point increase in expenditures, at least 0.2 percentage points can be attributed to the increased generosity of the system after 2000, so the conditions existing in 2000 and the changes in the interest rates determined a growth of maximum 0.5 percentage points.

**Other subsidies**

**INFLUENCING FACTORS**

The scope of other subsidies includes the subsidy system of household energy (gas and electricity) and railway public transport. The state support given to these services includes the quasi-fiscal activity of the service companies (MOL, MVM and MÁV), too, in addition to the direct budgetary subsidies extended to them.

For the purposes of this analysis, quasi-fiscal activities are the relative losses suffered by state-owned companies operating outside the government sector, as a result of the regulation of the prices by the government. The involvement in this kind of operation does not necessarily mean that the given economical entity is constantly loss-making, i.e. this operation can

**Figure 6**

**HOUSING SUBSIDY**

Nominal accumulated growth compared to the year 2000 level

Note: see Appendix C for exact data
be maintained, and, in principle, be continued on the long term, too. A good example for this is MOL, which suffered significant losses because of the subsidy of household gas prices at the beginning of the 2000’s, but because of their other revenues, it was able either to suffer a smaller loss, or to gain a significant profit (not independently of the low level of the state mining tax, which may facilitate a significant profit). MVM is able to partially or fully counterbalance the loss from the government price regulation with the low prices of the nuclear power plant in Hungarian ownership, but in the case of the foreign power plants, the existing contracts do not make this possible, or to a small extent only. In the case of the MÁV, the expenses of passenger transport not paid by the government are counterbalanced to some extent by the profit generated (or at least accounted) in the cargo branch.

If the company is owned by the government partly only, then only the loss on the part owned by the state is to be considered as a quasi-fiscal activity, because the loss on the part owned by private parties is to be interpreted as implicit tax as a revenue financing the state subsidy of the population.\(^{14}\) However, this “revenue” or saving is reduced by the debt assumption or capitalization of the company from time to time. The difference between the total state subsidy and the loss transferred to private owners as savings (or “income”) will burden the budget (increase the deficit) in a given year.

The budgetary effects of the state subsidies on the service provided by company \(i\) are explained below:

\[
W'_i = W'_b - T'_i = W'_b - (S'_i - W'_d)
\]

where

- \(W'_b\) is the net state subsidy on the service extended by company \(i\) (appropriated in the budget),
- \(W'_d\) is the total state subsidy on the service provided by company \(i\) (consumer prices subsidy, subsidy to producers and the operating loss of the company),
- \(T'_i\) is the budgetary savings related to the service extended by company \(i\),
- \(S'_i\) is the private owners’ loss in company \(i\) that can be attributed to the government price regulation + “payment into the budget under special titles”,
- \(W'_d\) is capital allocated to company \(i\) (including debts assumption).

For the financing of the retail gas price subsidy, the budget started to collect a special mining tax from MOL in 2003, which is interpreted as “payment into the budget under special title”. The state gas price subsidy granted to the customers was the loss of the MOL gas branch (in 2001–2002) and the amount paid by the government directly to subsidize the price of gas (from the so-called energy management fund created in 2003). The government savings achieved in connection with the gas price subsidy is a loss forced on the private owners of the company – as a kind of tax – in 2001–2002, as well as the company’s payment to the energy management fund since 2003.

**Results**

It is probably surprising, that in our calculations, the gas price subsidy was not a net subsidy at the beginning of the period, because it was possible to finance the low prices from the operating loss of MOL (by debiting the loss against the profit due to the private owners of MOL). The main reason for the significant gas price subsidy deficit of 2006 was the increase in the price of imported gas, which was not compensated by the inpayment obligation of the MOL. (See Figure 7)

The subsidy on the price of electric energy contributed to the budget deficit significantly in 2001 only, when the government had to capitalize the MVM, after the loss of the capital of the firm as a consequence of price regulation.\(^{15}\)
The state subsidy to the railways appeared mainly in 2002, when the budget assumed a debt of over HUF 100 billion from the company, but the government subsidies were significant in 2005 and 2006, too, in the form of the increased direct subsidy.

**Tax revenues from the private sector**

The analysis of the taxation system should consider the fact that the increase in government wages was calculated in net, so it is only the amount of taxes and other contributions paid in the private sector that have to be analysed here. Some of the tax benefits (housing and family subsidies) were discussed earlier, so we will not take them into consideration here. For the sake of simplicity, the simplified business tax (“eva”) will be treated completely as a tax on consumption. We do not undertake the estimation and impact analysis of the taxation morals and the efficiency of tax collection.

**Corporate tax**

**INFLUENCING FACTORS**

The development of the corporate tax is divided into the effects of four factors: the development of the tax base (gross operating profit of the corporate sector), the changes in the tax rates (and some other taxation rules, e.g. whether the local business tax can be deducted), the introduction of the special tax of loan institutions and financial businesses, and the reduction of tax benefits.

The fact that the tax base increased by a different amount than the GDP is considered as an external factor. The development of tax benefits is rather an external factor, as they depend on the decisions of the companies and the government, too, but the majority of government measures to introduce benefits were taken before the examined period.

\[
T_{ev} = T_{bas} + T_{rel} + T_{rel} = GDP \left( S \frac{T_{bas} - T_{bas}}{T_{bas}} \right) + O_{rel} + T_{rel} + T_{rel}
\]

where
GDP: nominal GDP,
S: gross operating profit of corporate sector,
$T_{pn}$: net corporate tax,
$T_{pg}$: gross corporate tax,
$T_{pmn}$: adjusted net corporate tax (net corporate tax without the special tax of loan institutions and financial businesses and without the effect of the changes in the taxation system in 2006),
$T_{pgn}$: adjusted gross corporate tax (net corporate tax without the special tax of loan institutions and financial businesses and without the effect of the changes in the taxation system of in 2006),
$T_{pof}$: special tax of loan institutions and financial businesses, net,
$T_{poe}$: effect of changes in taxation in 2006, net (expert's calculation for the following changes in taxation rules: possibility to write off a part of the local business tax, its VAT effects, changes in depreciation, introduction of rate of 10% for SMEs),
$T_{pc}$: tax benefits in the narrow sense,
$\tau$: corporate tax rate in the law,
$O_{pc}$: other effects and residual.

**RESULTS**

The GDP-proportionate corporate tax revenues were reduced by the changes in the corporate taxation rules (primarily by the reduction of the rate) and the changes in other taxation rules (+0.3 percentage point). (See Figure 8) On the other hand, the revenues were increased by the introduction of the special tax of loan institutions and financial businesses (–0.2 percentage point), and the reduction of the tax benefits (–0.2 percentage points).

It seems that the revenues were increased by the growth of the tax base that was higher than the growth of GDP (–0.1 percentage point), but were reduced by other factors (+0.3 percentage point).16

**Figure 8**

**CORPORATE TAX REVENUES**
Nominal accumulated growth compared to the year 2000 level

Note: see Appendix C for the exact data
Personal income tax

INFLUENCING FACTORS

We adjusted personal income tax revenues with those components not related to wages and salaries. The growth of this adjusted personal income tax revenues were influenced by the productivity of the private sphere, the wage raises over the productivity, the number of people employed by the private sector, the effective tax rates and the tax benefits. From the tax benefits, two items have to be highlighted: one of them is the pension contribution benefit that existed at the beginning of the period, but was terminated at the very end of it, and the other is the tax credit, which grew significantly in 2003. These changes should definitely be considered as government decisions. The family tax allowance and the tax benefit on housing loans repayment were already discussed in the chapter dealing with the incomes received from the state, so they are ignored here, and other factors influencing the tax benefits are not considered, either.

\[
T_{PI,n} = T_{PI,n,2000} \eta \left( \frac{W_{PI}}{\eta} \right) N^{P} \frac{T_{PI,n}}{T_{PI,n,2000}} \tau_{PI} O_{PI}^{P}
\]

\[
T_{PI,n} = T_{PI,n} - T_{PI,n-1}
\]

where

- \( T_{PI,n} \): gross personal income tax revenue from the private sector,
- \( T_{PI,n} \): narrow scope of tax benefits,
- \( T_{PI,n,2000} \): \( T_{PI,n} \) in 2000,
- \( \tau_{PI} \): personal income tax average rate,
- \( O_{PI}^{P} \): residual, other effects.

RESULTS

The GDP-proportionate deficit has been diminished by \(-0.1\) percentage point due to the wage growth above productivity and increases in the number of employees in the private sector, increased by \(+0.6\) percentage point due to the decrease of the effective tax rate, and decreased by the reduction of tax allowances by \(-0.1\) percentage point (at the end of the period).

The GDP-proportionate net personal income

Figure 9

PERSONAL INCOME TAX

Nominal accumulated growth compared to the year 2000 level

Please note: The exact data is to be found in Appendix C
tax revenues grew in 2001, and then dropped back due to an upsurge of tax allowances in 2002–2004. Their dropping back halted in 2005. However, in 2006 the decrease of the net revenues continued because of the rate cut, only partly counterbalanced by the widening of the tax base, i.e. the decreasing of allowances.

**Contributions**

**INFLUENCING FACTORS**

Changes in contribution revenues were influenced by the productivity of the private sector, the gross wage increases above productivity in the private sector, the changes in the contribution rates, and the growing membership of private pension funds. The increase of the rate of employee’s social security contribution paid into the state pension insurance fund did compensate for the increased rate of the contribution paid by private fund members into private pension funds in 2003 and 2004. (In 2003, the employee’s pension contribution was increased by 0.5 percentage point, and in 2004 the health care contribution by 1 percentage point.) We did not undertake to carry out an impact analysis of the withdrawal of the upper limit of payment per employee into health fund in 2001. We consider the whole of the factor labelled other to be exogenous (not a result of government’s decision).

The algebraic relation below represents the highlighted factors:

\[
T_S = \sum T^p_i = \sum \frac{\sigma_p^p}{\eta} N^{\sigma_p} R^{\sigma_p} O^{\sigma_p}
\]

where

- \(T_C\): total revenues from contributions,
- \(T^p_i\): contribution revenues from the private sector (with the exception of the employee’s social security contribution),
- \(\tau_{Si}\): contribution rate for \(i\) contribution,
- \(R^{PP}:\) if \(i\) is contribution paid by employees then it is the proportion of those who are not members of private funds, 2000 = 100, if is not contribution paid by employees then it is 1.

**CONTRIBUTION REVENUES**

Nominal accumulated growth compared to the year 2000 level

![Chart](image)

Please note: The exact data is to be found in Appendix C.
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O^e_Si: the effect of other factors, residual, 2000 = 100.

RESULTS
The deficit was diminished by wage increases above productivity (−0.1 percentage point) and by the increase of employee’s rates (−0.1 percentage point); whereas it was increased by the decrease of employer’s rates (+0.6 percentage point) and by the increasing size of the membership of private pension funds (+0.1 percentage point).

Private pension funds caused to increase the ESA deficit by 0.6 percentage point in 2000 and 1.5 percentage points in 2006, which means that they contributed 0.9 percentage point to the deficit in the period that we examined. Yet, our calculations suggests that the effect of private funds is significantly smaller than that. The reason is that – as it has already been mentioned – in the meantime, the loss was partly compensated for by the increase of the employee’s contribution to be paid into the state social security funds, and our calculation quantifies the net effect that was smaller because of this rate increases.

Unrealised contribution revenues due to the decrease of (employer’s) contribution rates amounted to 209 billion HUF. Out of that, 64 billion HUF was related to the wages of those employed in the government sector, so the effect of the rate cuts truly affecting the budget balance amounted to 145 billion HUF.

“Other” factors have a significant positive value (decreasing deficit by −0.6 percentage point).

Lump sum health care contribution
INFLUENCING FACTORS
Changes concerning the lump sum health care contribution (eho) from the private sector are due to changes in the flat rate of the contribution itself and in the number employed in the private sector.

T^e_{eho} = N^e_{eho} \cdot \tau_{eho} \cdot O_{eho}
where
T^e_{eho}: total revenues from lump sum health care contribution paid by the private sector,
\tau_{eho}: per employee value of lump sum health care contribution,
N_{eho}: number employed in private sector,
O_{eho}: residual, other effects.

RESULT
The GDP-proportionate deficit was increased by +0.7 percentage point by decreasing the flat rate health care contribution, while it was practically unaffected by changes in the employment figures. The extent of the increase of the amount of the flat rate health care contribution fell behind the pace of growth of the nominal GDP each year. (See Figure 11)

VAT
INFLUENCING FACTORS
The most important factors influencing VAT:
• the effects increasing disposable incomes in comparison with the basic scenario,
• the shift in the consumption structure towards standard VAT rate products, and
• the rate changes.

Disposable incomes were diverted from the baseline by the measures of the governments analysed and quantified above and by the increase of the wage share of the private sector. The nominal growth of VAT revenues generated due to higher disposable incomes must be divided in the proportion of the relative size of the factors that influenced disposable income.

\[ T_V = T_V^{PC} + T_V^{GC} + T_V^{FO} + T_V^{FO} + T_V^{FO} = \]
\[ = W_e \cdot \frac{W_c}{W_e} (1 - s) c_{A} \cdot \tau_{V} \cdot O_{V} + T_V^{GC} + T_V^{FO} + T_V^{FO} \]
where
T^{PC}_V: sum of net VAT and simplified entrepreneurial tax revenues
T^{GC}_V: VAT of household final consumption
expenditure and households’ investments,

\[ T^{\text{PCV}}_V \]: VAT of household final consumption expenditure and households’ investments in 2000,

\[ T^{\text{G}}_V \]: VAT paid by the government sector,

\[ T^{\text{FI}}_V \]: VAT paid by financial institutions,

\[ T_O^V \]: other VAT,

\[ W \]: disposable incomes,

\[ W_C \]: disposable incomes adjusted by deducting the effects of government measures influencing disposable incomes and of the increase of the wage share of the private sector,

\[ s \]: net lending of households (in proportion of disposable incomes),

\[ C_{\text{struct}} \]: the effect of the shift in the consumption structure on the effective VAT rate, 2000 = 100,

\[ \tau_{\text{V}} \]: the effect of the change of the VAT rate and reclassifications on the effective VAT rate, 2000 = 100,

\[ O_{\text{V}} \]: residual, other effects, 2000 = 100.

**RESULTS**

The deficit was decreased by the increase of incomes received from the state and by the indirect positive effect of reclassification of some products from reduced to standard rate (−0.3 percentage point in 2006), the increase of the wage share of the private sector (−0.1 percentage point in 2006), and the shift in the consumption structure towards standard VAT rate products (−0.1 percentage point). On the whole, rate changes increased the deficit (+0.2 percentage point). (See Figure 12)

The negative effect of the decrease of the standard VAT rate, causing a huge loss of revenue in 2006, was mostly compensated for by the positive effect of the increase of the reduced rate in 2004, which is why rate changes had a relatively moderate effect if we consider several years together. The decrease of the standard rate in 2006 in itself caused a budgetary deficit amounting to approximately 200 billion HUF (compared to the basic scenario established according to our calculation).
“Other” factors (residual) that has remained unexplained is of a significant value, and with a minus sign. This is likely to be due to the often-mentioned fact that the extent of tax avoidance conspicuously grew in connection with the EU accession, which is usually traced back to the change of the tax collection system (i.e. the switch to the self reporting system from the customs office controlled one). The data available suggests that it is not subsequent to the EU accession that tax avoidance spread, but earlier (it had already amounted to 0.4 percent of the GDP in 2001), which, however, does not invalidate the basic suggestion that the spread of tax avoidance is connected to the accession process (in a general sense) as the basis of the typical VAT fraud techniques which are wide-spread in the EU is not EU membership but involvement in foreign trade with EU-countries. In addition to this, it cannot be excluded that the extent of tax avoidance has also grown domestically. Altogether, avoidance could contribute an approximate +0.7 percentage point to the deficit.

**Other taxes on consumption**

**INFLUENCING FACTORS**

The most important factors influencing other taxes on consumption are the state measures that altogether increased disposable incomes, the increase of the wage share of the private sector, and the decrease of the effective tax rate (the regular failure to revaluate excise duty rate).

Households' fuel purchases constitute final consumption while companies purchase fuel for intermediate production. Accordingly, there exist three factors explaining the changes concerning the state revenues derived from the excise duty of fuel used by companies:

- GDP growth,
- the changes of the intermediate consumption of the private sector divergent from the GDP, and
- the effective tax rate.

Hungary's being obliged to harmonise its excise duty rate because of the EU accession to some extent (primarily concerning the obligatory tax content of cigarette prices) generated surplus revenues for the public finance. We
have deducted this surplus from actual tax revenue as we give an account for the effects of the EU-harmonisation in the part on the budgetary effects of the EU accession.

\[ T_j = W_s \frac{W}{W_e} (1-s) \tau_{HJ} + Y^p \frac{Q^p}{Y^p} \tau_{JH} \]

where

- \( T_j \): taxes on consumption besides VAT (excise duty, consumption tax, vehicle registration tax, energy tax, gambling tax, motor vehicle taxes, other goods and services taxes) decreased by the surplus revenue generated due to the EU harmonisation,
- \( Y^p \): added value of the private sector,
- \( Q^p \): intermediate consumption of companies,
- \( \tau_{HJ} \): effective average excise duty rate of household consumption,
- \( \tau_{JH} \): effective average excise duty rate of intermediate consumption of companies.

**RESULTS**

The state measures increasing disposable incomes and the increase of the private sector wage share decreased the deficit by \(-0.2\) percentage point, but other effects, mainly those of the repeated lack of revaluations (+0.2 percentage point) counterbalanced it. (See Figure 13)

**Interest expenditures**

**INFLUENCING FACTORS**

When investigating the details of the changes in interest expenditures, we abandoned the method of regarding productivity-proportionate and GDP-proportionate changes as basic scenarios. Instead, we constructed another basic scenario assuming that the 2000 Maastricht primary debt would remain unchanged – GDP-proportionately – during the whole period. This corresponded to our generally applied assumption that the GDP-proportionate size of expenditures and revenues remained unchanged in the basic scenarios. Under the baseline scenario concerning interests, the year 2000 monetary and financing conditions (implicit interest rates, i.e. both the interest premium and the proportion of HUF / foreign currency debts) remained unchanged, but we adjusted the debt stock with the actual privatisation revenues (i.e. as a base-case, we hypothesised that there had been no privatisation revenues after 2000).

To break down the changes in interest expenditures we used the Maastricht debts (in HUF and foreign currencies), the interest expenditures in the budget, as well as the implicit interest rates calculated both for HUF and for foreign currency denominations, which we simply calculated as the ratio of the interest expenditure (in HUF or in foreign currency) and the respective debtstock.

The algebraic relation that we started out from was:

\[ \frac{I}{Y} = \frac{i^p D^p + i F D^F}{Y} \]

where

- \( Y \): nominal GDP
- \( I \): interest expenditure,
- \( i \): implicit interest rate,
- \( D \): debt stock \((D = D^F + D^p)\), and
- the superscript indices \( D \) and \( F \) refer to HUF (domestic), and foreign currencies (foreign), respectively.

With certain algebraic transformations we arrive at:

\[ I = iD + (i^p - i) \frac{D^p}{D} D \]

To calculate the effect of privatisation, we deducted the interest expenditure explained by the formula below from the actual interest expenditure on a residual basis.

Firstly, we established two factors within the changes in GDP-proportionate interest expenditures. Breaking down the two factors (sepa-
rately), the first produced the effect of the changes in the implicit foreign currency interest rate, as well as a part of the effect deriving from the change of the debt stock; while the second expression produced the effect of the changes in the interest premium, the modifications caused by the change of the internal structure of the debt (moving toward higher proportion of HUF denominated stock), as well as the other part of the effect deriving from the change of the debt stock. We broke down the change of the debt stock into three factors: the effect of the change of the nominal GDP, the effect that the growth of the debt stock under the baseline scenario would have diverged from the growth rate of the GDP (would have grown slower), and the effect of the additional primary deficits resulted from those political decisions and external factors that are analysed in this study. The formula is:

\[
\frac{D^p_{t+1}}{D^p_t} = Y_{t+1} \left( \frac{D^A_{t+1}}{Y_t} \cdot \frac{Y_{t+1}}{Y_t} \right) \cdot \left( \frac{D^p_{t+1}}{D^A_{t+1}} \cdot \frac{D^A_{t+1}}{D^p_t} \right)
\]

where

- \(D^p\): actual debt portfolio without privatisation revenues,
- \(D^A\): debt portfolio under the basic scenario without privatisation revenues.

The three factors of the multiplication represent the three effects mentioned above, respectively.

**RESULTS**

Under the baseline scenario public debt in 2006 would only have amounted to 36.9% in GDP, and thus interest expenditures would have been 1.6 percentage points lower in GDP (even if the higher level of interest rates of 2000 lasted up to 2006). (See Figure 14.) However, foreign currency interest rates decreased due to a favourable international climate (–1.25 percentage points) and the diminishing interest premium (–0.18 percentage point) significantly counterbalanced the adverse effects of the increase of the debt portfolio (+1.56%).

Privatisation revenues caused the deficit to decrease by –0.18 percentage point. Nevertheless, due to processes unrelated to the budgetary policy, interest expenditures grew by +0.33
percentage point. Another factor that deterio-
rated the balance, to a smaller extent, though, was the increase of the proportion of debts in HUF (+0.18 percentage point).

The effect of the EU accession and customs revenues

INFLUENCING FACTORS
The budget deficit is increased by the contribu-
tion to the EU-budget and by the net loss of customs revenue, i.e. the difference between the disappearing customs revenues and the compensa-
tion for customs collection costs by the EU. Additionally the deficit is lowered by the EU compensation19 and the compensation for sugar levy collection costs. We have considered that the increase in excise duty revenues due to EU regulations is connected to the EU accession in a manner exactly analogous to customs decrea-
ses. The agricultural subsidies from the EU have partly replaced such items in the central budget, resulting in a decrease in the deficit.

Below, we shall only scrutinise on the direct effects of the EU accession, leaving out of con-
sideration another, favourable budgetary effect, i.e. that the availability of EU funds make the financing of earlier programs possible with lower domestic funding. We find this solution justifi-
able according to the additionality criteria, too.

RESULTS
Payments to the EU caused the deficit to increase by 0.8 percentage point in proportion of the GDP, while the deficit relating to the customs system amounts to 1 percentage point. The total of EU compensation and the compensation for sugar levy collection costs is insignificant.

The deficit-diminishing effect of the increase of the excise duty rates due to EU regulations amounts to 0.3 percentage point, and the agricultural subsidies from the EU replaced budg-
etary expenditures by 0.3 percentage point. (See Figure15)

All in all, the EU accession increased the GDP-proportionate deficit by a total of 1.1
percentage points due to the factors listed above, which finding remains valid irrespective of the fact that the main objective of the increase of the reduced VAT rate in 2004 was exactly to counterbalance this effect.

SUMMARY

We have reviewed the most important changes regarding the structure of the central budget between 2000 and 2006 and have presented the main reasons of the increase of the budget deficit based on the figures. As for 2006, we have established a hypothetical deficit as a subject of the comparison which – based on experts’ estimates – would have arisen if it had not been for the significant adjustment measures introduced in mid-2006. Prior to making comparisons between the GDP-proportionate budget deficits of the two years, we cleaned the data of all one-off effects, which modified the extent of the difference between year 2000 and 2006 deficits to 6.3 percentage points. The table below shows the cumulative deficit increasing effect of the separate factors:

Our calculations have revealed that the reasons of the increase of the deficit cannot be attached to a narrow area of expenditures or revenues. By no means can they be attributed to one or two important decisions of the economic policy, either. (See Table 3) Practically speaking, almost all essential budget items had a part in the process: each important tax type, each major type of income that private individuals received from the state, as well as the EU accession itself, and, as a consequence of these – naturally – the debt burden. (The only exception is the so-called non-wage operational costs of the state, which – perhaps in harmony with the unchanged number of governmental employees – did not rise at a pace higher than the nominal GDP) The diversity of the measures causing the increase of the deficit and the very different characteristics of these discredit

\[\text{EU-RELATION AND CHANGES IN CUSTOMS REVENUES} \]

Nominal accumulated growth compared to the year 2000 level

\[\text{Figure 15}\]

Please note: The exact data is to be found in Appendix C.
# SIGNIFICANCE OF THE FACTORS THAT EXPLAIN CHANGES IN THE DEFICIT

Table 3

<table>
<thead>
<tr>
<th>Political Decisions</th>
<th>Decisions increasing the deficit</th>
<th>Decisions decreasing the deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>growth of dept stock as a consequence of political decisions</td>
<td>1.56</td>
<td></td>
</tr>
<tr>
<td>one-off effects (including motorway investments)</td>
<td>1.48</td>
<td></td>
</tr>
<tr>
<td>net wage increases in the government sector above the increase of productivity of the private sector</td>
<td>1.45</td>
<td></td>
</tr>
<tr>
<td>net loss of customs revenues because of the EU accession</td>
<td>1.00</td>
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<tr>
<td>developmental policy</td>
<td>0.82</td>
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<tr>
<td>decrease of lump sum health care contribution</td>
<td>0.66</td>
<td></td>
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<tr>
<td>decrease of income tax rates, together with its effect on the Swiss index</td>
<td>0.63</td>
<td></td>
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<tr>
<td>decrease of the social security contribution rate</td>
<td>0.55</td>
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<tr>
<td>effect of (extraordinary) pension increases over the Swiss index (built in the pension base)</td>
<td>0.54</td>
<td></td>
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<tr>
<td>13th month pensions</td>
<td>0.52</td>
<td></td>
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<tr>
<td>balance of EU payments and compensations</td>
<td>1.48</td>
<td></td>
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<tr>
<td>family support from central budget</td>
<td>0.46</td>
<td></td>
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<tr>
<td>gas price support (taking savings from quasi-fiscal activity into consideration)</td>
<td>0.31</td>
<td></td>
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<tr>
<td>changes of mortgage bond and housing loans interest rate subsidy after 2000</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>changes in VAT rates and classifications</td>
<td>0.20</td>
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<tr>
<td>changes of corporate income tax rates</td>
<td>0.19</td>
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<tr>
<td>lack of revaluation of other taxes on consumption</td>
<td>0.17</td>
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<tr>
<td>housing supports without significant lagging effects</td>
<td>0.13</td>
<td></td>
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<tr>
<td>corporate income tax regulatory changes in 2000</td>
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<td>change of the number of employees in the government sector</td>
<td>0.03</td>
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<tr>
<td>change in the intensity of drug subsidy</td>
<td>–0.61</td>
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<tr>
<td>decrease of personal income tax allowances (without family allowance and allowance on housing loan repayments)</td>
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<td>special tax of financial institutions</td>
<td>–0.15</td>
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<tr>
<td>decrease of family tax allowance</td>
<td>–0.28</td>
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<td>replacement of agricultural subsidies by EU transfers</td>
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<td>effect of privatisation revenues on interest expenditures</td>
<td>–0.18</td>
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<td>taxation effect of state measures influencing disposable incomes</td>
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<td>subsidy of rail transport, net</td>
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<td>effect of tax evasion on VAT revenues (on a residual basis)</td>
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<td>rotational effect in pensions</td>
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<tr>
<td>effect of growing drug consumption on subsidy</td>
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<tr>
<td>determinations of the mortgage bond and housing loans interest rate subsidy system</td>
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<tr>
<td>change in the currency denomination of debt stock</td>
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<tr>
<td>decrease of the proportion of those who are not private pension fund members</td>
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<tr>
<td>increase of intermediate consumption falling behind increase of GDP (at other taxes on consumption)</td>
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<tr>
<td>demographic impact on pension expenditures (decrease in number of pensioners)</td>
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<tr>
<td>expiry of certain housing subsidies</td>
<td>–0.07</td>
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<tr>
<td>shift in consumption structure</td>
<td>–0.07</td>
<td></td>
</tr>
<tr>
<td>increase in the number of employees in the private sector</td>
<td>–0.08</td>
<td></td>
</tr>
<tr>
<td>increase of the corporate income tax base above that of GDP</td>
<td>–0.08</td>
<td></td>
</tr>
<tr>
<td>effect of interest rate cuts on housing loans interest rate subsidies</td>
<td>–0.13</td>
<td></td>
</tr>
<tr>
<td>change in interest premium</td>
<td>–0.19</td>
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<tr>
<td>wage increase in the private sector above productivity growth</td>
<td>–0.21</td>
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<tr>
<td>decrease in corporate income tax allowances</td>
<td>–0.23</td>
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<tr>
<td>other (sum of inexplicable factors in the case of income tax contributions, and corporate income tax)</td>
<td>–0.39</td>
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<tr>
<td>effect of factors influencing deficit, unrelated to political decisions, on interest expenditures</td>
<td>0.33</td>
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<tr>
<td>decrease of GDP-proportionate debt under baseline scenario</td>
<td>–1.20</td>
<td></td>
</tr>
<tr>
<td>effect of change in foreign currency interest rate on interest expenditures</td>
<td>–1.25</td>
<td></td>
</tr>
</tbody>
</table>
oversimplifying explanations, which are often present in the public discourse and cite only one or two reasons. Still, the figures have revealed that each of the explanations, mentioning any of the reasons listed, actually has some partial truth to it.20

In the course of the analysis, we did take into consideration not only the impact of the measures of the state, but certain exogenous factors as well. Differentiating between endogenous – i.e. government-induced – and exogenous factors is an essential point within the study; However, our choices applied in this respect are not meant to exclude the possibility of a debate (which is the reason why we have taken such great care concerning the documentation of the data that we used).

According to our own principles of classification, the exogenous effects have mostly served to improve the balance (especially the decrease of the international interest rates and the increase of the wage share in the private sector), thus it can be claimed that the rise of the deficit has been caused by decisions that the economic policy controlled. We can establish five groups within these political decisions:

• the increase of households incomes and transfers received from the state (2.8 percentage points),
• the decrease of the tax burdens of the private sector (1.8 percentage points),
• the EU accession (1.1 percentage points),
• one-off expenditures (mainly motorway constructions) and other expenditures relating to the developmental policy (2.2 percentage points) the increase of the debt and the interest expenditures due to these (1.4 percentage points).

Due to this all-embracing looseness of budgetary policy the debt level reached 66% in GDP whereas under the baseline scenario (without this general looseness) it would only have amounted to 36.9% in GDP.

All this reinforces the general opinion that the whole budgetary policy and the budgetary system need/needed to be readjusted and reformed. Accordingly, the adjustment measures announced in mid-2006 are expected to curb the previous increase of the incomes received from the state in proportion of the GDP – in the case of all types of incomes with the exception of pensions –, while tax revenues from the private sector are to rise again due to higher tax rates, the tax burden in its entirety is not expected to rise above the year 2000 level.

It is obvious that the optimal solution for putting the budget in order should not necessarily entail the total turnaround of the tax decreases of the past 6 years as these measures have partly served to decrease the above-the-average burdens of labour incomes, the direct negative budgetary effect of the EU accession is not going to disappear as the payments to the EU rise in proportion of the GDP, while the revenues are not to flow into the budget in the future, either, this effect which deteriorates the balance permanently, partly justifies increasing the tax burdens to a certain extent.

The debt burden means the highest external risk in the years to come since – as we have seen – the only reason for the decrease of the interest expenditures in proportion of the GDP was the decrease of the EUR interest rate. Should the trend of the last few years reverse, it may induce the increase of the HUF interest rate, constituting an increase of 0.7 percentage point per percentage point in proportion of the GDP in the deficit. A remedy against this may be the decrease of the debt rate in the middle run. However, in the short run, the only remedy may be decreasing the HUF risk premium. At the moment, we know of no better recipe for that latter end than the restoration of the discipline and the credibility of the economic policy.
APPENDICES

APPENDIX A

Table 1

<table>
<thead>
<tr>
<th>TYPES OF EXPENDITURES SUPERVISED BY EU UNDER ADDITIONALITY CRITERIA</th>
</tr>
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<tbody>
<tr>
<td><strong>Main group</strong></td>
</tr>
<tr>
<td><strong>1. Basic infrastructure</strong></td>
</tr>
<tr>
<td>Transport</td>
</tr>
<tr>
<td>Telecommunication</td>
</tr>
<tr>
<td>Energy</td>
</tr>
<tr>
<td>Environment</td>
</tr>
<tr>
<td>Health</td>
</tr>
<tr>
<td><strong>2. Human resources</strong></td>
</tr>
<tr>
<td>Education/training</td>
</tr>
<tr>
<td>R&amp;D</td>
</tr>
<tr>
<td><strong>3. Productive environment</strong></td>
</tr>
<tr>
<td>Agriculture/Rural development/Fisheries</td>
</tr>
<tr>
<td>Industry</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Tourism</td>
</tr>
<tr>
<td><strong>4. Other</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

APPENDIX B

Table 2

BUDGETARY DATA ON THE INTERNAL BREAKDOWN OF CONTRIBUTION REVENUES AND THE VAT PAID BY THE INSTITUTION OF THE GENERAL GOVERNMENT, CASH-BASED (million HUF)

<table>
<thead>
<tr>
<th>Types of contributions</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributions paid by employers, government, expenditure table</td>
<td>385 970.8</td>
<td>432 404.8</td>
<td>510 039.3</td>
<td>599 477.7</td>
<td>661 091.8</td>
<td>669 552.5</td>
<td></td>
</tr>
<tr>
<td>Social security contribution revenues from outside the public finance</td>
<td>759 729.3</td>
<td>884 458.7</td>
<td>920 507.1</td>
<td>1 000 629.7</td>
<td>1 136 973.5</td>
<td>1 186 042.8</td>
<td></td>
</tr>
<tr>
<td>Social security contribution revenues from within the public finance</td>
<td>315 986.1</td>
<td>312 417.2</td>
<td>406 389.9</td>
<td>476 472.6</td>
<td>494 720.8</td>
<td>601 963.6</td>
<td>552 193.7</td>
</tr>
<tr>
<td>Employer’s contribution (Labour market fund) revenues</td>
<td>93 714.9</td>
<td>110 655.3</td>
<td>131 754.0</td>
<td>146 334.5</td>
<td>157 567.2</td>
<td>172 832.2</td>
<td>186 711.0</td>
</tr>
</tbody>
</table>

(continued on the following page)
Lump sum health care contribution 169 712.1 179 933.5 186 646.3 152 175.8 150 455.8 138 090.8 78 937.0
Lump sum health care contribution from within the public finance 47 113.4 38 842.2 49 328.9 36 792.2 39 471.3 44 268.7 18 708.0
Lump sum health care contribution from outside the public finance 122 598.7 141 091.3 137 317.4 115 383.3 110 984.5 93 694.1 58 098.0
Sick leave contribution 13 386.8 14 624.5 18 066.0 21 382.6 22 380.3 23 164.7 19 730.4
Other contributions 56 793.3 81 058.9 95 248.5 97 284.4 100 856.2 115 192.2 142 109.5
Contributions paid by employees 264 551.1 314 355.3 371 391.3 407 579.2 457 600.4 500 284.9 562 234.3
Employee's contribution (Labour market fund) revenues 42 864.0 50 537.4 60 035.3 47 141.3 48 259.5 58 787.3 51 146.7
Employee’s pension and health care insurance contributions (social security) 221 687.1 263 817.9 311 356.0 360 437.9 409 340.9 441 467.6 455 087.6

VAT related items among the non-wage operational expenses of the public finance
VAT charged 117 135.9 130 360.7 147 124.9 155 338.9 185 661.2 198 296.8
VAT paid to the tax authority 11 722.9 12 918.4 14 790.8 16 403.8 15 964.9 15 817.4

Please note: the 2004–2005 cash-based figures have been adjusted: 40 billion HUF has been added to the 2004 figures and deducted from the 2005 figures.

Source: Ministry of Finance

APPENDIX C
Data, remarks, and partial results of calculations

Wages in the government sector
Our calculations have been based on the – somewhat unjustified – assumptions that the composition (sector-based distribution) of those employed by the state has not changed. The results of the modification in the composition therefore mingle with the effects of the general wage raise.

The calculations are based on the compensation of employees in the government sector in the national accounts. The government sector is somewhat wider, thus the overall wage expenditure is larger than that can be seen in the budgetary final accounts (by approximately 0.4 percentage point in proportion of the GDP). As the government’s decisions concern the wider government sector, it is expedient to use figures in national accounts.

Please note that the 2006 figures are to be treated with care, firstly, as they are preliminary figures, and, secondly, as they are not available within exactly the same framework as the figures relating to 2000–2005. Thus, concerning 2006, calculation on gross compensation of employees are based on the Convergence Programme (CP) figures, whereas the respective contribution and income tax revenues paid by the institutions in the government sector are estimated on the basis of the 2006 Budget Act.

<p>| Table 3 |</p>
<table>
<thead>
<tr>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wage growth following the productivity of the private sector</td>
<td>99.6</td>
<td>206.3</td>
<td>293.9</td>
<td>383.1</td>
<td>470.3</td>
</tr>
<tr>
<td>Average gross wage income increases in the government sector above the productivity of the private sector</td>
<td>36.5</td>
<td>104.6</td>
<td>201.4</td>
<td>155.5</td>
<td>168.0</td>
</tr>
<tr>
<td>Increase in the number of employees</td>
<td>–2.7</td>
<td>9.2</td>
<td>31.7</td>
<td>29.0</td>
<td>17.7</td>
</tr>
</tbody>
</table>

(continued on the following page)
We have used the data of the Hungarian Central Statistical Office concerning increases in the average net earnings in both the private and the government sectors. This is important to highlight because the budgetary data on the changes of average net wage incomes in the government sector may be used as an alternative source of data. However, as it has been mentioned before, there are significantly different total net wage figures in the two sources, and consequently different wage dynamics are arrived. The reason for using the statistics of the Hungarian Central Statistical Office when analysing pensions is that it is demanded by the law on pension, and it is the basis of the Swiss index. Despite all our efforts to harmonise the two statistics, we have not found a real solution.
Family supports

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child care benefit</td>
<td>13.5</td>
<td>47.1</td>
<td>107.1</td>
<td>100.1</td>
<td>118.5</td>
<td>263.2</td>
</tr>
<tr>
<td>Family tax allowance</td>
<td>47.3</td>
<td>46.4</td>
<td>38.3</td>
<td>35.9</td>
<td>35.1</td>
<td>–31.8</td>
</tr>
<tr>
<td>Nominal accumulated growth of family supports</td>
<td>60.9</td>
<td>93.5</td>
<td>145.3</td>
<td>136.0</td>
<td>153.6</td>
<td>231.4</td>
</tr>
<tr>
<td>Baseline scenario: maintaining a GDP-proportionate level</td>
<td>32.5</td>
<td>68.5</td>
<td>100.8</td>
<td>134.0</td>
<td>158.5</td>
<td>187.2</td>
</tr>
</tbody>
</table>

Drug subsidies

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drug subsidy</td>
<td>150.8</td>
<td>179.5</td>
<td>209.0</td>
<td>251.8</td>
<td>289.0</td>
<td>348.9</td>
<td>388.0</td>
</tr>
<tr>
<td>Pharmaceutical producer’s price index, year on year average</td>
<td>103.2</td>
<td>105.4</td>
<td>105.4</td>
<td>112.1</td>
<td>108.0</td>
<td>106.5</td>
<td>107.0</td>
</tr>
<tr>
<td>Pharmaceutical producer’s price index, cumulated</td>
<td>103.2</td>
<td>108.8</td>
<td>114.6</td>
<td>128.5</td>
<td>138.8</td>
<td>147.8</td>
<td>158.2</td>
</tr>
<tr>
<td>Pharmaceutical consumption (amount paid by private individuals)</td>
<td>83.3</td>
<td>111.0</td>
<td>134.4</td>
<td>146.4</td>
<td>159.0</td>
<td>177.6</td>
<td>222.1</td>
</tr>
<tr>
<td>Total expenditure relating to pharmaceutical consumption</td>
<td>234.1</td>
<td>290.4</td>
<td>343.5</td>
<td>398.2</td>
<td>448.0</td>
<td>526.5</td>
<td>610.1</td>
</tr>
<tr>
<td>Subsidy ratio</td>
<td>0.64</td>
<td>0.62</td>
<td>0.61</td>
<td>0.63</td>
<td>0.65</td>
<td>0.66</td>
<td>0.64</td>
</tr>
</tbody>
</table>

The data in the table is to be treated with caution as the figures of the Health Care Statistics of the Hungarian Central Statistical Office concerning the pharmaceutical consumption of private individuals in 2005 and 2006 are not available yet. As a proxy, we decided to rely on the turnover figures of retail units engaged in the sale of drugs and medical products.

Housing subsidies

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supports with significant lagging effects</td>
<td>8.2</td>
<td>14.9</td>
<td>35.1</td>
<td>100.6</td>
<td>145.0</td>
<td>172.4</td>
<td>152.8</td>
</tr>
<tr>
<td>Interest rate subsidies (of private houses constructions)</td>
<td>2.4</td>
<td>8.2</td>
<td>27.7</td>
<td>89.7</td>
<td>130.4</td>
<td>154.9</td>
<td>129.5</td>
</tr>
<tr>
<td>Interest rate subsidies of local government loans*</td>
<td>0.7</td>
<td>0.2</td>
<td>1.8</td>
<td>4.9</td>
<td>6.3</td>
<td>6.7</td>
<td>7.0</td>
</tr>
<tr>
<td>Home savings fund supports</td>
<td>5.1</td>
<td>6.5</td>
<td>5.7</td>
<td>5.9</td>
<td>8.3</td>
<td>10.7</td>
<td>16.3</td>
</tr>
<tr>
<td>Supports without spread-over effects</td>
<td>32.6</td>
<td>37.1</td>
<td>31.2</td>
<td>34.8</td>
<td>57.6</td>
<td>77.5</td>
<td>69.9</td>
</tr>
<tr>
<td>Social housing subsidy**</td>
<td>24.2</td>
<td>21.3</td>
<td>19.2</td>
<td>30.1</td>
<td>33.3</td>
<td>39.1</td>
<td>38.2</td>
</tr>
<tr>
<td>Social housing subsidy with advance payment</td>
<td>−0.2</td>
<td>−0.2</td>
<td>−0.3</td>
<td>0.0</td>
<td>1.0</td>
<td>2.7</td>
<td>9.2</td>
</tr>
<tr>
<td>Young people’s home building support</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>16.6</td>
<td>16.0</td>
</tr>
</tbody>
</table>

(continued on the following page)
It is not easy to separate the effects of government measures and other factors on the increase of housing loan interest subsidies. It is practically impossible with necessary accuracy to analyse the numerous regulatory changes after 2000, the growth of the stock of mortgage bonds and housing loans, the changes in monetary conditions, and the interactions of these factors. No accurate statistics on the stock data harmonising with the data on borrowing are available, and all stock data from before 2004 is missing. Information had been provided by the Housing Loan Monitor of Magyar Téglás Szövetség (Tiles and Bricks of Hungary) since 2000, but only in 2003 did it become a requirement within the framework of obligatory data provision to provide information for the ministerial unit dealing with this subject.

We chose the following solution regarding interest subsidies: we considered the consequence of government measures the part of the increase of expenditures that caused the expenditures to be higher than it would have been expected if the 2000 conditions of subsidy had been unchanged, that is, we made an estimate: what if there had existed the 2000 subsidy conditions in 2006 and the stock of mortgage bond and housing loan stock had been the same as in Q1 2006, then we made the same estimate but assumed that the relevant interest rates to be at their 2000 level (this way estimating the effects of interest rate changes in the period).

\[
H_r = H_{rM} + \{D_{sub6} I_{sub0} + (D_{sub6} (I_{sub6} - I_{sub0})) + (H_{sub6} - D_{sub6} I_{sub0} - D_{sub6} (I_{sub6} - I_{sub0}))\}
\]

where

- \(H_r\): increase of housing loans and mortgage bond interest rate subsidy between 2000 and 2006 (HUF),
- \(H_{rM}\): change of mortgage bond interest rate subsidy between 2000 and 2006 (HUF),
- \(H_{sub6}\): sum of housing loans interest rate subsidy in 2006,
- \(I_{sub6}\): percentage of housing loans interest rate subsidy, with 2000 benchmark interest rates,
- \(I_{sub0}\): percentage of housing loans interest rate subsidy, with 2006 benchmark interest rates,
- \(D_{sub6}\): housing loan stock with housing loans interest rate subsidy in 2006.

The increase in mortgage bond interest rate subsidy (\(H_{rM}\)) solely originates from the change of the volume of the mortgage bond stock as the subsidy system established in 2000 sets a fixed interest rate subsidy.
Concerning the changes in the housing loans interest rate subsidy system, \( D_{sub6} I_{sub0} \) expresses how large the expenditure would have been without changes in the interest rates; the expression \( D_{sub6} (I_{sub6} - I_{sub0}) \) shows the effect of the changes of the interest rates on expenditures; and the expression \( H_{sub6} - D_{sub6} I_{sub0} - D_{sub6} (I_{sub6} - I_{sub0}) \) unifies all the other effects of the changes in the subsidy system.

As Table 10 below shows, the subsidy granted for mortgage bonds and housing loans interest rate subsidy amounted to 126.9 billion HUF in 2006. Under the year 2000 conditions, a subsidy demand of 76.8 billion HUF would have been generated on the 2006 stock. Improved monetary conditions in 2006 would have resulted in savings worth 30.9 billion HUF if the loans stock had been borrowed under the 2000 conditions. With the given stock, and filtering out the effects of the changes in the benchmark interest rates, other factors caused a growth of expenditures of 50 billion HUF. By other factors we mean the “generosity” or “closeness” of the system.

The condition of the subsidy system obviously influences people's willingness to borrow (i.e. the changes in the loan stock), while households' income situations, their need to make up for private investments that have failed to take place before, the distribution of incomes, several other socio-economic factors, as well as the expectations concerning changes in the subsidy system also have a considerable impact on that willingness. The increased generosity of the subsidy system – especially concerning subsidies granted for mortgage bonds – compared to 2000 was one of those other factors. Therefore the growth of mortgage bond and housing loan stock is partly the results of endogenous and partly of exogenous factors, but we cannot estimate the relative weight of them.

### Table 10

<table>
<thead>
<tr>
<th>Loans with only mortgage bond interest subsidy</th>
<th>2005</th>
<th>2006</th>
<th>2006 estimated expenditures on the portfolio at the beginning of 2006 under the 2000 subsidy conditions</th>
<th>2006 expenditures</th>
<th>2000–2006 difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortgage bonds with interest rate subsidy, total*</td>
<td>1 258 391</td>
<td>1 257 725</td>
<td>37 732</td>
<td>37 732</td>
<td>93 850</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Loans with housing loans interest rate subsidy</th>
<th>2005</th>
<th>2006</th>
<th>2006 estimated expenditures on the portfolio at the beginning of 2006 under the 2000 subsidy conditions</th>
<th>2006 expenditures</th>
<th>2000–2006 difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-side housing loan interest rate subsidy</td>
<td>192 243</td>
<td>184 707</td>
<td>18 200</td>
<td>9 286</td>
<td></td>
</tr>
<tr>
<td>One-side housing loan interest rate subsidy</td>
<td>424 459</td>
<td>456 351</td>
<td>51 812</td>
<td>29 788</td>
<td></td>
</tr>
<tr>
<td>Housing loans interest rate subsidy, total</td>
<td>616 703</td>
<td>641 057</td>
<td>70 012</td>
<td>39 074</td>
<td>33 000</td>
</tr>
<tr>
<td>Total #</td>
<td>1 875 094</td>
<td>1 988 783</td>
<td>107 744</td>
<td>76 806</td>
<td>126 850</td>
</tr>
</tbody>
</table>

* 3 percentage point subsidy
** Two-side housing loan interest rate: appropriate benchmark minus 5.5%  
*** One-side housing loan interest rate: appropriate benchmark minus 4%  
# Loans with housing loan interest rate subsidy + Mortgage bonds with interest rate subsidy, total
We claim that 50 billion HUF – i.e. 0.2 percentage point in proportion of the 2006 GDP – out of the growth of interest subsidies amounting to 126.8 billion HUF between 2000 and 2006 is to be regarded as the consequence of post-2000 government measures (drawing attention to the importance of the cautious wording in this respect). If the 2000 conditions had been maintained and the monetary policy had remained unchanged – assuming that stock increase was exogenous –, expenditures would have risen to 107.7 billion HUF, which would have been decreased by 31 billion HUF due to diminishing interests. As an overall effect of these, “freezing” the 2000 subsidy conditions, but also, keeping the subsidy system intact would have caused expenditures to rise to 76.8 billion HUF.

We would emphasise again, it is difficult to guess how the housing loan portfolio would have developed without state subsidy. We did not examine this relation during this phase of the analysis. What can be stated is that subsidy conditions considerably improved in 2001–2002, which accelerated the growth of the bond and loan stock. However, the regulatory changes introduced in late 2003 curbed the growth of the loan portfolio. The factors influencing housing investments, and consequently the willingness to borrow are likely to have had a great part in the growth of stock. Dynamically rising wages were a factor to lead to the expansion of the subsidised loan stock.

Other subsidies
A considerable portion of the data necessary for our calculations was provided by the reports of the companies in question and the budgetary final accounts. In the case of Hungarian Power Companies (MVM), we used an estimate prepared by the company at our request.

### Table 11

<table>
<thead>
<tr>
<th>(billion HUF)</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data on MÁV (Hungarian State Railways)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>usual business result (loss)</td>
<td>24.8</td>
<td>32.0</td>
<td>41.2</td>
<td>36.1</td>
<td>54.9</td>
<td>87.6</td>
<td>79.4</td>
</tr>
<tr>
<td>company specific subsidy</td>
<td>47.3</td>
<td>50.7</td>
<td>56.5</td>
<td>58.8</td>
<td>53.2</td>
<td>53.0</td>
<td>52.5</td>
</tr>
<tr>
<td>consumer price subsidy</td>
<td>20.0</td>
<td>21.3</td>
<td>24.3</td>
<td>24.2</td>
<td>27.9</td>
<td>28.8</td>
<td>30.5</td>
</tr>
<tr>
<td>MÁV debt assumption</td>
<td>36.5</td>
<td>0.0</td>
<td>117.7</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Data on MVM (Hungarian Power Companies)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes in the loss due to state price regulation*</td>
<td>12.5</td>
<td>9.9</td>
<td>40.7</td>
<td>–36.9</td>
<td>–1.1</td>
<td>–10.7</td>
<td>0.0</td>
</tr>
<tr>
<td>MVM’s recapitalisation</td>
<td>0.0</td>
<td>32.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Data on MOL (Hungarian Oil and Gas)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss generated by the gas and energetics branch</td>
<td>–118.9</td>
<td>–124.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas price subsidy in the budget, emte expenses**</td>
<td>1.1</td>
<td>43.8</td>
<td>76.0</td>
<td>208.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas price subsidy in the budget, emte revenues**</td>
<td>10.1</td>
<td>65.8</td>
<td>108.7</td>
<td>84.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*+ = increase of loss
** emte = energy management fund

### Table 12

<table>
<thead>
<tr>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other subsidies (I+II+III)**</td>
<td>169.9</td>
<td>167.0</td>
<td>316.1</td>
<td>74.0</td>
<td>59.0</td>
<td>49.1</td>
</tr>
<tr>
<td>I Subsidy of rail transport, net (=I.1-I.2)</td>
<td>140.2</td>
<td>72.0</td>
<td>316.1</td>
<td>83.0</td>
<td>81.0</td>
<td>81.8</td>
</tr>
<tr>
<td>I.1 Subsidy of rail transport, gross (a+b.)</td>
<td>128.5</td>
<td>104.0</td>
<td>239.7</td>
<td>119.1</td>
<td>136.0</td>
<td>169.4</td>
</tr>
</tbody>
</table>

(continued on the following page)
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(continued from the previous page)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.2 State “revenue” (savings) from the quasi-fiscal activity of the rail company (c.-d.)</td>
<td>11.7</td>
<td>32.0</td>
<td>–76.5</td>
<td>36.1</td>
<td>54.9</td>
<td>87.6</td>
<td>79.4</td>
</tr>
<tr>
<td>a. MÁV’s loss (usual business result)</td>
<td>24.8</td>
<td>32.0</td>
<td>41.2</td>
<td>36.1</td>
<td>54.9</td>
<td>87.6</td>
<td>79.4</td>
</tr>
<tr>
<td>b. State transfers received by the rail company**</td>
<td>103.7</td>
<td>72.0</td>
<td>198.5</td>
<td>83.0</td>
<td>81.0</td>
<td>81.8</td>
<td>83.0</td>
</tr>
<tr>
<td>c. Debt assumption</td>
<td>36.5</td>
<td>0.0</td>
<td>117.7</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>II Subsidy of electric energy, net (=II.1-II.2)</td>
<td>0.0</td>
<td>64.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>II.1 Subsidy of electric energy, gross (a.+b.)</td>
<td>12.5</td>
<td>41.9</td>
<td>40.7</td>
<td>–36.9</td>
<td>–1.1</td>
<td>–10.7</td>
<td>0.0</td>
</tr>
<tr>
<td>a. Changes in the loss due to state price regulation</td>
<td>12.5</td>
<td>9.9</td>
<td>40.7</td>
<td>–36.9</td>
<td>–1.1</td>
<td>–10.7</td>
<td>0.0</td>
</tr>
<tr>
<td>b. MVM’s recapitalisation</td>
<td>0.0</td>
<td>32.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>II.2 State “revenue” (savings) from the quasi-fiscal activity of MVM (c.-d.)</td>
<td>12.5</td>
<td>–22.1</td>
<td>40.7</td>
<td>–36.9</td>
<td>–1.1</td>
<td>–10.7</td>
<td>0.0</td>
</tr>
<tr>
<td>c. Changes in the loss due to state price regulation</td>
<td>12.5</td>
<td>9.9</td>
<td>40.7</td>
<td>–36.9</td>
<td>–1.1</td>
<td>–10.7</td>
<td>0.0</td>
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<tr>
<td>d. MVM’s recapitalisation</td>
<td>0.0</td>
<td>32.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>III Gas price subsidy, net (=III.1-III.2)</td>
<td>29.7</td>
<td>31.0</td>
<td>0.0</td>
<td>–9.0</td>
<td>–22.1</td>
<td>–32.7</td>
<td>124.6</td>
</tr>
<tr>
<td>III.1 Gas price subsidy, gross (a.+b.)</td>
<td>118.9</td>
<td>124.1</td>
<td>0.0</td>
<td>1.1</td>
<td>43.8</td>
<td>76.0</td>
<td>208.8</td>
</tr>
<tr>
<td>a. Loss generated by MOL’s gas business branch</td>
<td>118.9</td>
<td>124.1</td>
<td>0.0</td>
<td>1.1</td>
<td>43.8</td>
<td>76.0</td>
<td>208.8</td>
</tr>
<tr>
<td>b. Emte expenditures</td>
<td>1.1</td>
<td>43.8</td>
<td>76.0</td>
<td>208.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III.2 State “revenue” (savings) from the quasi-fiscal activity of MOL and emte revenues (c.+d.)</td>
<td>89.2</td>
<td>93.1</td>
<td>10.1</td>
<td>65.8</td>
<td>108.7</td>
<td>84.2</td>
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<tr>
<td>c. Privately owned shares (lost dividend)</td>
<td>89.2</td>
<td>93.1</td>
<td>10.1</td>
<td>65.8</td>
<td>108.7</td>
<td>84.2</td>
<td></td>
</tr>
<tr>
<td>d. Emte revenues</td>
<td>10.1</td>
<td>65.8</td>
<td>108.7</td>
<td>84.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The change of other subsidies influenced the ESA-deficit (in HUF) (decrease = decreasing the notified ESA-deficit, increase = increasing the notified ESA-deficit)

** Consumer price subsidies, company specific subsidies, debt assumptions

---

**Corporate income tax**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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</thead>
<tbody>
<tr>
<td>Operating surplus of the business sector</td>
<td>2902.6</td>
<td>3166.8</td>
<td>3815.3</td>
<td>3967.5</td>
<td>4363.6</td>
<td>4831.5</td>
<td>5327.2</td>
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<tr>
<td>Corporate income tax, net, actual</td>
<td>295.7</td>
<td>344.8</td>
<td>396.6</td>
<td>413.7</td>
<td>448.7</td>
<td>430.1</td>
<td>492.0</td>
</tr>
<tr>
<td>Out of which: special tax*</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>35.6</td>
<td>36.1</td>
</tr>
<tr>
<td>Tax allowances</td>
<td>100.4</td>
<td>80.9</td>
<td>82.6</td>
<td>129.3</td>
<td>50.4</td>
<td>62.5</td>
<td>75.6</td>
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<tr>
<td>Corporate income tax rates **</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>18.0</td>
<td>16.0</td>
<td>16.0</td>
<td>16.0</td>
</tr>
<tr>
<td>Effect of tax regulation changes in 2006***</td>
<td>–18.8</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net corporate income tax, adjusted#</td>
<td>295.7</td>
<td>344.8</td>
<td>396.6</td>
<td>413.7</td>
<td>448.7</td>
<td>394.5</td>
<td>474.7</td>
</tr>
</tbody>
</table>

* Credit institutions and financial enterprises
** The 10% rate for SMEs appeared in 2006
*** Deductibility of the local business tax, VAT effect, depreciation, introduction of the 10% rate
# Without the special tax of credit institutions and financial enterprises, without the effect of tax regulation changes in 2006

We started out from the accrual-based net value of the corporate income tax, and also made use of the accrual-based tax allowance figures.
There exists a publicly available governmental estimate regarding the value of the special tax of credit institutions and financial enterprises introduced in 2005. However, regarding the size of other 2006 changes of tax regulations, only the expert calculations of the Ministry of Finance were available. The value of tax allowances can be found in the budgetary closing accounts.

### Table 14

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate cuts</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>−43.2</td>
<td>−40.4</td>
<td>−44.5</td>
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<tr>
<td>Tax changes in 2006</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>−18.8</td>
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<tr>
<td>Special tax</td>
<td>0.0</td>
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<td>0.0</td>
<td>0.0</td>
<td>35.6</td>
<td>36.1</td>
</tr>
<tr>
<td>GDP</td>
<td>38.7</td>
<td>82.5</td>
<td>118.0</td>
<td>156.2</td>
<td>166.9</td>
<td>209.7</td>
</tr>
<tr>
<td>Operating surplus of the business sector</td>
<td>−10.9</td>
<td>11.5</td>
<td>−8.2</td>
<td>−8.9</td>
<td>7.7</td>
<td>19.9</td>
</tr>
<tr>
<td>Tax allowances</td>
<td>26.0</td>
<td>35.4</td>
<td>7.1</td>
<td>68.2</td>
<td>49.8</td>
<td>54.6</td>
</tr>
<tr>
<td>Other</td>
<td>−4.8</td>
<td>−28.5</td>
<td>1.0</td>
<td>−19.2</td>
<td>−85.3</td>
<td>−60.7</td>
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<tr>
<td>Nominal accumulated growth of corporate income tax revenues</td>
<td>49.1</td>
<td>100.8</td>
<td>117.9</td>
<td>153.0</td>
<td>134.4</td>
<td>196.3</td>
</tr>
<tr>
<td>Baseline scenario: maintaining a GDP-proportionate level</td>
<td>38.1</td>
<td>80.2</td>
<td>118.1</td>
<td>156.9</td>
<td>185.6</td>
<td>219.1</td>
</tr>
</tbody>
</table>

### Personal income tax

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sum of personal income tax, net</td>
<td>965.2</td>
<td>1131.3</td>
<td>1294.4</td>
<td>1321.5</td>
<td>1367.1</td>
<td>1449.7</td>
<td>1572.3</td>
</tr>
<tr>
<td>The part of PIT revenues not related to wages and salaries</td>
<td>74.2</td>
<td>80.0</td>
<td>95.5</td>
<td>95.2</td>
<td>103.4</td>
<td>120.8</td>
<td>141.8</td>
</tr>
<tr>
<td>Average tax rate*</td>
<td>29.0</td>
<td>29.1</td>
<td>29.1</td>
<td>29.1</td>
<td>26.1</td>
<td>25.1</td>
<td>24.7</td>
</tr>
<tr>
<td>Gross personal income tax, adjusted***</td>
<td>1111.8</td>
<td>1296.4</td>
<td>1455.7</td>
<td>1637.0</td>
<td>1577.7</td>
<td>1643.4</td>
<td>1753.3</td>
</tr>
<tr>
<td>out of which: public sector (estimated)</td>
<td>332.5</td>
<td>345.8</td>
<td>457.5</td>
<td>531.4</td>
<td>542.4</td>
<td>528.8</td>
<td>544.2</td>
</tr>
<tr>
<td>private sector (estimated)</td>
<td>779.3</td>
<td>950.6</td>
<td>998.2</td>
<td>1105.6</td>
<td>1035.4</td>
<td>1114.6</td>
<td>1209.2</td>
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<tr>
<td>Deductible tax allowances**</td>
<td>154.8</td>
<td>179.7</td>
<td>176.1</td>
<td>277.4</td>
<td>206.1</td>
<td>213.3</td>
<td>222.7</td>
</tr>
</tbody>
</table>

* Tax calculated / consolidated tax base
** Private sector, estimated, narrowly defined allowances
*** Without PIT revenues not related to wages and salaries

The Hungarian Central Statistical Office publishes data on the wages of those employed by the state. Firstly, it publishes the compensation of governmental employees figures in the framework of the national accounts, which are in harmony with the budgetary data compiled according to the ESA methodology. Secondly, it publishes the average wages and numbers of those employed in the public sector. The two data sources publicate significantly different figures, the dynamics of which are differing, as well. Therefore, our analysis proves to be inconsistent at this point: in the case of pensions, we relied on the statistics on net average wages – as the law requires, whereas in the case of wages in the government sector, we worked with net wage income of governmental employees figures in the national accounts.

It is only possible to estimate the distribution of the overall ESA-95 income tax revenues between the private and the government sector on the basis of cash-based data. A cash-based data tables compiled in the Ministry of Finance provide details on how much of some types of contributions derived from the private and how much of government sectors. Concerning other types of contributions [employer’s and employee’s (labour market) contribution revenues, sick leave
contribution, employee’s pension and health care contributions] and personal income tax where such details are unavailable, we divided the total revenue between the private and government sectors in the same proportion as that calculated at the former types.23

The discrepancies between the cash-based and accrual-based frameworks cause a major problem regarding the years 2004–2005, which we attempted to correct. The 13th month wages for 2004 were paid in 2005. The 13th month wages due for 2004 and paid in 2005, does not concern the accrual-based compensation of government employees in 2005, whereas it increases the amount of cash-based contributions income derived from the government sector. To correct this inconsistency, we added an approximate value of 40 billion HUF to the 2004 aggregate contributions revenues derived from within the general government, and deducted the same from the 2005 aggregate contributions revenues.

The data table in Appendix B does not contain the whole ESA circle, only the general government. Therefore it was necessary to modify the data on the income tax and contribution payments of the government sector presented in this particular data table by using a quotient expressing the proportion of the ESA circle and the general government in the wage expenditures figures each year. [For this, we divided the sum of the wage expenditures in the budgetary closing accounts (including employer’s contribution expenditures) by the ESA-based compensation of government employees, this ratio is fluctuating between 94–96% in that period.]

It may be a source of inaccuracy that the compensation of government employees in 2006 is identical with the data in the Convergence Programme, while we only made approximate estimates for the distribution of the individual types of contributions and of income tax revenues between the private and government sectors. [We assumed that in 2006, all the leeway of contributions expected prior to the adjustment programme was to fully ensue, this would represent an approximate 1.8% decrease in the case of each contribution type (employer’s social security payments, employer’s payments (into the Labour Market Fund), sick pay contributions, etc.) compared to the level appropriated in the Budget Act.]
We calculated the average tax rates using the data tables compiled by Tax and Financial Control Administration (APEH) from the income tax returns of private individuals. The exact results are presented in the table below.

<table>
<thead>
<tr>
<th>Table 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
</tr>
<tr>
<td>Increase of productivity of the private sector</td>
</tr>
<tr>
<td>Rate cuts</td>
</tr>
<tr>
<td>Average gross income increase, divergent from productivity, private sector</td>
</tr>
<tr>
<td>Change in the number of employees in the private sector</td>
</tr>
<tr>
<td>Tax allowances in the private sector</td>
</tr>
<tr>
<td>Other factors in the private sector</td>
</tr>
<tr>
<td>Nominal accumulated growth of personal income tax revenues</td>
</tr>
<tr>
<td>Baseline scenario: maintaining a GDP-proportionate level</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Contributions</th>
</tr>
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<tbody>
<tr>
<td>Table 17</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>Employer’s social security contribution rate</td>
</tr>
<tr>
<td>Employer’s Labour Market Funds contribution</td>
</tr>
<tr>
<td>Membership of private pension funds, thousand people*</td>
</tr>
<tr>
<td>Number of those that are not members of private pension funds, thousand people</td>
</tr>
<tr>
<td>Members’ PAYGO contribution rate</td>
</tr>
<tr>
<td>PAYGO contribution rate of those that are not members of private pension funds</td>
</tr>
<tr>
<td>Average PAYGO contribution rate, actual</td>
</tr>
<tr>
<td>Average PAYGO contribution rate, hypothetical**</td>
</tr>
<tr>
<td>Proportion of non-members, %</td>
</tr>
<tr>
<td>Employee’s Labour Market Funds contribution rate</td>
</tr>
</tbody>
</table>

* Data from the Hungarian Financial Supervisory Authority
** Assuming a permanent membership proportion

We established two factors concerning the impact of private pension funds.

1. On the one hand, during the whole of the period, the contribution rate to be paid to private pension funds by members increased from 6 to 8% (and the contribution to be paid to the state fund decreased from 2 to 0.5%), while the contribution rate to be paid by non-members to the state fund increased from 8 to 8.5%.

2. On the other hand, the number of non-members, i.e. those who do not belong to private pension funds, dropped. We calculated the effect of the contribution rate change assuming that the proportion of fund members among those employed had remained the same as in 2000.

Regarding “other” contributions of a smaller value and sick leave, we may only consider the effective and not the nominal rates (i.e. the quotients of the contributions collected and the tax base). The exact results are presented in the table below.
Table 18

<table>
<thead>
<tr>
<th>(million HUF)</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase of productivity</td>
<td>213,088</td>
<td>436,695</td>
<td>569,759</td>
<td>783,752</td>
<td>959,654</td>
<td>1,180,370</td>
</tr>
<tr>
<td>out of which: in the government sector</td>
<td>57,557</td>
<td>129,306</td>
<td>172,564</td>
<td>246,480</td>
<td>294,240</td>
<td>349,674</td>
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<tr>
<td>in the private sector</td>
<td>155,530</td>
<td>307,389</td>
<td>397,194</td>
<td>537,271</td>
<td>665,414</td>
<td>830,697</td>
</tr>
<tr>
<td>Increase above the productivity of the private sector</td>
<td>42,508</td>
<td>59,701</td>
<td>127,958</td>
<td>130,587</td>
<td>137,668</td>
<td>90,928</td>
</tr>
<tr>
<td>out of which: in the government sector</td>
<td>21,103</td>
<td>65,577</td>
<td>118,221</td>
<td>100,060</td>
<td>105,111</td>
<td>69,097</td>
</tr>
<tr>
<td>in the private sector</td>
<td>21,405</td>
<td>52,072</td>
<td>30,389</td>
<td>39,772</td>
<td>61,849</td>
<td>63,112</td>
</tr>
<tr>
<td>Rate change</td>
<td>72,564</td>
<td>158,440</td>
<td>184,957</td>
<td>191,785</td>
<td>202,150</td>
<td>209,137</td>
</tr>
<tr>
<td>out of which: in the government sector</td>
<td>20,492</td>
<td>52,072</td>
<td>109,136</td>
<td>127,185</td>
<td>139,038</td>
<td>145,354</td>
</tr>
<tr>
<td>in the private sector</td>
<td>52,072</td>
<td>48,626</td>
<td>75,772</td>
<td>61,849</td>
<td>63,112</td>
<td>63,783</td>
</tr>
<tr>
<td>Change in the number of employees in the private sector</td>
<td>5,680</td>
<td>2,131</td>
<td>15,708</td>
<td>8,016</td>
<td>13,798</td>
<td>11,495</td>
</tr>
<tr>
<td>Change in the contribution rate change paid by employees*</td>
<td>0</td>
<td>0</td>
<td>−2,566</td>
<td>14,147</td>
<td>14,700</td>
<td>15,002</td>
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<tr>
<td>Decrease in the rate of non private pension fund members</td>
<td>−2,612</td>
<td>−1,330</td>
<td>−4,996</td>
<td>14,839</td>
<td>24,477</td>
<td>35,069</td>
</tr>
<tr>
<td>Other</td>
<td>30,276</td>
<td>113,063</td>
<td>126,970</td>
<td>102,067</td>
<td>148,433</td>
<td>173,458</td>
</tr>
<tr>
<td>out of which: in the government sector</td>
<td>−55,859</td>
<td>5,677</td>
<td>4,644</td>
<td>54,699</td>
<td>31,332</td>
<td>26,572</td>
</tr>
<tr>
<td>in the private sector</td>
<td>86,135</td>
<td>107,386</td>
<td>122,326</td>
<td>47,368</td>
<td>117,100</td>
<td>146,886</td>
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<tr>
<td>Nominal accumulated growth of contribution revenues</td>
<td>214,066</td>
<td>299,085</td>
<td>402,072</td>
<td>430,239</td>
<td>676,033</td>
<td>854,059</td>
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<td>Baseline scenario: maintaining a GDP-proportionate level</td>
<td>134,522</td>
<td>283,468</td>
<td>417,211</td>
<td>554,394</td>
<td>655,779</td>
<td>774,415</td>
</tr>
</tbody>
</table>

* Assuming an identical private pension fund membership proportion

VAT

The changes in the main factors influencing VAT are presented in the table below.

Table 19

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable incomes, W</td>
<td>7926.3</td>
<td>9122.3</td>
<td>10168.1</td>
<td>11072.7</td>
<td>12246.4</td>
<td>13553.4</td>
<td>14161.4</td>
</tr>
<tr>
<td>Adjusted disposable incomes, Wc</td>
<td>7926.3</td>
<td>8906.5</td>
<td>9943.5</td>
<td>10321.3</td>
<td>11468.2</td>
<td>12605.2</td>
<td>13296.6</td>
</tr>
<tr>
<td>Household final consumption expenditure, C</td>
<td>7129.2</td>
<td>8208.5</td>
<td>9077.8</td>
<td>10120.5</td>
<td>10759.9</td>
<td>11589.4</td>
<td>12436.9</td>
</tr>
<tr>
<td>Adjusted household final consumption expenditure, Cc</td>
<td>7129.2</td>
<td>8014.3</td>
<td>8877.2</td>
<td>9433.8</td>
<td>10076.2</td>
<td>10778.6</td>
<td>11677.4</td>
</tr>
<tr>
<td>Effect of analysed factors, C/Cc*</td>
<td>1.02</td>
<td>1.02</td>
<td>1.07</td>
<td>1.07</td>
<td>1.08</td>
<td>1.07</td>
<td>1.07</td>
</tr>
<tr>
<td>Average VAT rate, actual**</td>
<td>17.1</td>
<td>17.1</td>
<td>17.2</td>
<td>17.3</td>
<td>19.1</td>
<td>19.1</td>
<td>16.6</td>
</tr>
<tr>
<td>Average VAT rate, hypothetical***</td>
<td>17.2</td>
<td>17.3</td>
<td>17.3</td>
<td>17.3</td>
<td>17.3</td>
<td>17.3</td>
<td>17.3</td>
</tr>
</tbody>
</table>

*Effects of increase of wage share, and state measures on disposable incomes
** Based on Consumer Price Index booklets
*** Based on Consumer Price Index booklets, without the effect of tax regulations

Table 20

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAT, accrual-based</td>
<td>1159.8</td>
<td>1251.0</td>
<td>1373.0</td>
<td>1539.9</td>
<td>1831.6</td>
<td>1858.5</td>
<td>1771.0</td>
</tr>
<tr>
<td>Simplified business tax</td>
<td>42.9</td>
<td>74.6</td>
<td>96.2</td>
<td>108.9</td>
<td>108.9</td>
<td>108.9</td>
<td>108.9</td>
</tr>
<tr>
<td>VAT of household final consumption expenditure + households' investments, including simplified business tax</td>
<td>1004.8</td>
<td>1097.5</td>
<td>1215.0</td>
<td>1364.2</td>
<td>1627.5</td>
<td>1700.8</td>
<td>1626.6</td>
</tr>
<tr>
<td>Households' investments</td>
<td>40</td>
<td>47.5</td>
<td>51</td>
<td>56.4</td>
<td>58</td>
<td>58</td>
<td>59.6</td>
</tr>
</tbody>
</table>

(continued on the following page)
Among VAT revenues, we analysed those relating to household final consumption expenditure in detail. VAT of households investments signifies the VAT of purchased ready flats, while VAT related to constructions and reconstructions made by households, representing a higher proportion, is comprised in the VAT of household final consumption. For this reason, we dealt with the VAT of household investments together with the VAT of household final consumption.

The primary effect of the introduction of the simplified business tax in 2003 was a decrease in VAT revenues. In our calculation, we explained the sum of VAT of household final consumption, household investments and the simplified business tax through the factors that we deemed relevant.

In 2006, the total of VAT revenues from sources other than household final consumption and household investments are expected to be 0.1 percentage point lower than in 2000, the most significant item among other consumption is the VAT content of the non-wage operational expenditures of the general government, which, in a net perspective, does not influence the budget deficit. Incidentally, according to certain budgetary reports, the proportion of these was relatively permanent, i.e. 1%, of the GDP. (It needs mentioning that before 2003, the figures of VAT revenues derived from purchases of different budgetary institutions, presented in the budgetary closing accounts, somewhat differed from the values presented in the above-mentioned reports.) Before 2003, VAT revenues derived from financial institutions and from goods/services falling under activity-based tax exemption had solely been presented in closing accounts as estimated, not factual values.

Adjusted household final consumption, as presented in the table, belongs to a scenario in which households’ disposable incomes would have been influenced by the wages in the private sector rising at the same pace as productivity, and would not have been boosted by the government measures analysed by us; while private individuals’ willingness to consume (and save) would have the same as the actual level. We adjusted the actual values of disposable incomes, taking into consideration the effects of higher private sector wages and the state measures.

We calculated the effect of the social security measures affecting employees by multiplying net wage income by the difference of the contribution rates paid by employees effective in each year and those effective in 2000. As the total of employee's contributions rate has increased, disposable incomes have decreased.

When calculating the average VAT rate on household final consumptions, we relied on the estimation of the Hungarian Central Statistical Office for consumption basket weights. These are entered into the consumption price index with a two-year delay, so, for instance, the latest booklet in 2006 publishes data on the 2004 weights. Consequently, we had to make an own estimate concerning the average VAT rate regarding 2005–2006. We assumed that the yearly 0.04 percentage point shift of the consumption structure towards standard VAT rate products, which had been

<table>
<thead>
<tr>
<th>VAT on consumption</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>out of which: state</td>
<td>128.9</td>
<td>143.3</td>
<td>161.9</td>
<td>171.7</td>
<td>201.6</td>
<td>214.1</td>
<td>na</td>
</tr>
<tr>
<td>in the proportion of the GDP (%)</td>
<td>1.0</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>1.0</td>
<td>1.0</td>
<td>na</td>
</tr>
<tr>
<td>financial institution</td>
<td>33</td>
<td>33</td>
<td>34</td>
<td>43.6</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>other sectors</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>22</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
</tbody>
</table>
experienced at the beginning of the period, continued. We used a table, that the specialist division of the Ministry of Finance compiled, providing an estimate of the VAT rate of the groups of goods and services in the basket of Consumption Price Index.

Table 21

<table>
<thead>
<tr>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of adjusted household final consumption expenditures</td>
<td>139.5</td>
<td>281.0</td>
<td>370.1</td>
<td>534.9</td>
<td>637.7</td>
</tr>
<tr>
<td>Effect of analysed factors*</td>
<td>25.2</td>
<td>24.7</td>
<td>82.6</td>
<td>84.8</td>
<td>95.8</td>
</tr>
<tr>
<td>Shift in the consumption structure</td>
<td>3.6</td>
<td>14.6</td>
<td>29.8</td>
<td>11.3</td>
<td>14.6</td>
</tr>
<tr>
<td>Rate changes, reclassifications**</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>131.9</td>
<td>137.9</td>
</tr>
<tr>
<td>Other</td>
<td>−75.5</td>
<td>−110.1</td>
<td>−122.9</td>
<td>−140.1</td>
<td>−190.0</td>
</tr>
<tr>
<td>Nominal accumulated growth of the VAT on household final consumption expenditures and private investments</td>
<td>92.7</td>
<td>210.3</td>
<td>359.5</td>
<td>622.7</td>
<td>696.0</td>
</tr>
<tr>
<td>Baseline scenario: maintaining a GDP-proportionate level</td>
<td>129.3</td>
<td>272.6</td>
<td>401.1</td>
<td>533.0</td>
<td>630.5</td>
</tr>
</tbody>
</table>

*Effect of increase of wage share, state measures on disposable incomes
** 2004: increase of the lower VAT rate, 2006: decrease of standard VAT rate; reclassification of books and electricity to standard rate in 2004

The table below presents the distribution of the 81.3 billion HUF amount of the VAT revenues derived from the analysed factors.

Table 22

<table>
<thead>
<tr>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factors influencing disposable incomes, %</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Growth of average gross wage income above productivity in the private sector</td>
<td>52.3%</td>
<td>−8.6%</td>
<td>14.6%</td>
<td>25.0%</td>
<td>24.6%</td>
</tr>
<tr>
<td>Increase of the number of private sector employees</td>
<td>2.4%</td>
<td>0.8%</td>
<td>1.8%</td>
<td>0.9%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Political measures increasing pension expenditures</td>
<td>15.8%</td>
<td>33.5%</td>
<td>16.5%</td>
<td>22.4%</td>
<td>23.6%</td>
</tr>
<tr>
<td>Family supports</td>
<td>13.1%</td>
<td>11.1%</td>
<td>5.9%</td>
<td>0.3%</td>
<td>−0.5%</td>
</tr>
<tr>
<td>Housing subsidies</td>
<td>3.4%</td>
<td>10.5%</td>
<td>12.7%</td>
<td>18.8%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Average gross wage income increase and change in the number of employees a in the public sector*</td>
<td>19.1%</td>
<td>66.9%</td>
<td>39.6%</td>
<td>29.2%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Measures relating to personal income tax**</td>
<td>−6.0%</td>
<td>−14.1%</td>
<td>8.9%</td>
<td>14.5%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Measures relating to employee’s social security contributions</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>−11.1%</td>
<td>−10.0%</td>
</tr>
</tbody>
</table>

*Including the indirect effect of wage increases on additional pension increases
** Effect of changes in tax rate and tax allowances, both in the private and in the government sectors

Other taxes on consumption

Table 23

<table>
<thead>
<tr>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption taxes besides VAT</td>
<td>603</td>
<td>641</td>
<td>701</td>
<td>799</td>
<td>898</td>
<td>917</td>
</tr>
<tr>
<td>Consumption taxes besides VAT, adjusted*</td>
<td>506</td>
<td>534</td>
<td>587</td>
<td>679</td>
<td>698</td>
<td>728</td>
</tr>
</tbody>
</table>

*Deducting the estimated effect of the rate increases due to the EU accession and the excise duty of fuel purchased by companies

We adjusted the amount of excise duty revenues, taking into account the effect of the tax rate increases necessitated by the EU accession as we discuss this factor among the budgetary impacts of the EU accession.

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Excise duty is not only paid by households, but also, to a smaller extent, by companies, when purchasing fuel. Households pay for their fuel purchases from their disposable incomes, whereas companies purchase fuel as a part of their intermediate consumption. Accordingly, we divided other consumption taxes into two parts, explaining them in different ways.

<table>
<thead>
<tr>
<th>Private component</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household final consumption expenditures, adjusted</td>
<td>60.9</td>
<td>119.7</td>
<td>164.8</td>
<td>206.6</td>
<td>252.4</td>
<td>310.8</td>
</tr>
<tr>
<td>Effect of analysed state measures and wage share increase</td>
<td>12.4</td>
<td>12.2</td>
<td>41.4</td>
<td>39.2</td>
<td>44.2</td>
<td>42.5</td>
</tr>
<tr>
<td>Other*</td>
<td>-45.8</td>
<td>-50.8</td>
<td>-33.5</td>
<td>-54.2</td>
<td>-75.0</td>
<td>-32.5</td>
</tr>
<tr>
<td>Nominal accumulated growth of consumption taxes besides VAT</td>
<td>27.5</td>
<td>81.1</td>
<td>172.6</td>
<td>191.6</td>
<td>221.7</td>
<td>320.9</td>
</tr>
<tr>
<td>Baseline scenario: maintaining a GDP-proportionate level</td>
<td>60.9</td>
<td>119.7</td>
<td>164.8</td>
<td>206.6</td>
<td>252.4</td>
<td>310.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business component</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>12.3</td>
<td>25.1</td>
<td>36.2</td>
<td>50.3</td>
<td>55.3</td>
<td>65.4</td>
</tr>
<tr>
<td>Other</td>
<td>2.0</td>
<td>5.5</td>
<td>0.8</td>
<td>11.5</td>
<td>-5.7</td>
<td>-7.9</td>
</tr>
<tr>
<td>Excise duty of fuel purchased by companies</td>
<td>11.2</td>
<td>17.5</td>
<td>23.8</td>
<td>47.0</td>
<td>36.6</td>
<td>46.4</td>
</tr>
</tbody>
</table>

* Lack of revaluation and problems of tax collection

We did not undertake to separate the effect of the efficiency of tax collection from that of other factors; However, other available information suggests that smuggling had gained ground, which contributed to the decrease of taxes. The EU accession and the opening of the borders definitely played a part in this, which would have been possible to be counterbalanced by enhancing the efficiency of the tax authority. On the other hand, excise duty collection underwent significant positive changes in 2006.

**Health care contribution**

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health care contribution in the private sector</td>
<td>122.6</td>
<td>141.1</td>
<td>137.3</td>
<td>115.4</td>
<td>111.0</td>
<td>93.7</td>
<td>58.1</td>
</tr>
<tr>
<td>Flat rate of lump sum health care contribution HUF/person</td>
<td>3 900</td>
<td>4 200</td>
<td>4 500</td>
<td>3 450</td>
<td>3 450</td>
<td>3 325</td>
<td>1 950</td>
</tr>
</tbody>
</table>

Between 2000 and 2002, the government increased the flat rate of the lump sum health care contribution from 3900 to 4500 HUF, then significantly decreased it in 2003 (from 4500 HUF to 3450 HUF), and then kept it at the same level until November 1, 2005, when the amount of the health care contribution was further decreased to 1950 HUF.

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment in the private sector</td>
<td>0.6</td>
<td>0.2</td>
<td>1.5</td>
<td>0.7</td>
<td>1.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Change in the flat rate amount of health care contribution</td>
<td>17.9</td>
<td>14.5</td>
<td>-8.7</td>
<td>-12.3</td>
<td>-30.0</td>
<td>-65.2</td>
</tr>
<tr>
<td>Nominal accumulated growth of lump sum health care contributions</td>
<td>18.5</td>
<td>14.7</td>
<td>-7.2</td>
<td>-11.6</td>
<td>-28.9</td>
<td>-64.5</td>
</tr>
<tr>
<td>Baseline scenario: maintaining a GDP-proportionate level</td>
<td>15.8</td>
<td>33.3</td>
<td>48.9</td>
<td>65.0</td>
<td>76.9</td>
<td>90.9</td>
</tr>
</tbody>
</table>
The effect of the EU accession and the customs revenues

The calculations are based on net customs revenues, i.e. the amount of customs payments decreased by the administration costs of the customs organisations and increased by the compensation for customs collection costs received from the EU as of 2004. In Hungary, customs revenues had been on the decrease in GDP even before the EU accession (nominally) due to the continuous pre-accession decrease of customs tariffs and the WTO agreements, this revenue type ceased to exist on May 1 2004, the date of the accession.

We quantify savings in agricultural expenditures compared to what budgetary burden they would have caused if the year 2000 level of these expenditures in proportion of the GDP had been maintained. This is to be compared with how much we actually spent on this purpose from domestic funds.

EU agricultural supports and the Hungarian budget

Domestic funds between 2000 and 2003: To quantify the supports provided for the Hungarian agriculture we based our calculations on the items of agricultural supports in the central budget balance (including market access and agricultural production supports). This is cash-based data, and the sums lagging from one year to another were not negligible in this period. But there were no accrual-based figures available. However, it is not a big mistake to proxy accrual with cash-flow data, one can assume that the spreading from a given year equalled the payments effectuated in the next.

Domestic funds after 2004: The accrual-based expenditures covered from domestic sources are not very transparent. The expenditures – together with other items described in the chapters above – are contained in the item “running expenses and income supports” in the Ministry of Agriculture and Rural Development chapter in a cash-based framework. It contains the subsidies paid out in the given year, provided from domestic funds. The so-called top-up (national supplement) is to be found among these. According to the calculations, market access and agricultural production supports – still committed for 2004, similarly to the previous years – accounted for a total of 37.3 billion HUF in an accrual-based framework; while the accrual-based top-up accounted for 85.4 billion HUF. As for the years 2005–2006, we estimated the size of the top-up ourselves – as no similar Hungarian Central Statistical Office tables were available. We assumed that the top-up closely followed the direct payments received from the EU: the top-up provided from domestic funds in 2004, 2005, and 2006 accounted for 30%, 30% and 30% (regarding the direct payments due for EU Member States as 100%), while direct producer supports from the EU had been steadily growing and accounted for 25%, 30, and 35% in the above three consecutive years, respectively. It was possible to calculate the accrual-based top-up in 2005 and 2006 based on the accrual-based size of the direct producer supports.

EU subsidies: EU subsidies (direct producer subsidies, export subsidies, domestic market subsidies, and subsidies relating to intervention, reimbursed by the EU) first appeared in 2004. These are (approximately) accrual-based figures, which can be found in the tables presenting data on EU relations in the budgetary closing accounts of the given year.
The table shows that with the sole exception of 2001, the budget provided somewhat lower agricultural supports even prior to the EU accession, and after the EU accession it was possible to achieve considerable savings. We explain the decrease of domestic agricultural subsidies between 2000 and 2006 with the appearance of EU funds. Withholding agricultural subsidies from domestic funds diminishes expenditures due to the EU payments significantly, approximately halving them.

Two reasons were quoted to explain the changes in the VAT system in 2004 officially (i.e. in the budgetary closing accounts): EU law harmonisation and the need to maintain the budgetary equilibrium subsequent to the EU accession. Increasing the reduced 12% VAT rate to 15%, reclassifying the VAT rate of electricity from reduced 12% to standard 25%, and terminating VAT deductibility on subsidies relating to new investments and the non-wage operating expenditures of the general government are the measures to maintain the equilibrium of the budget, these measures generated a total surplus revenue of 137 billion HUF, which, according to our calcula-

---

**Table 27**

<table>
<thead>
<tr>
<th>(million HUF)</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Contribution to the EU budget</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>119,721</td>
<td>186,645</td>
<td>199,182</td>
</tr>
<tr>
<td>2. Compensation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>42,813</td>
<td>8,458</td>
<td>7,669</td>
</tr>
<tr>
<td>3. Customs and agricultural duties</td>
<td>137,730</td>
<td>125,013</td>
<td>129,341</td>
<td>132,638</td>
<td>39,884</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Administration costs of customs organisations</td>
<td>6,011</td>
<td>7,616</td>
<td>8,244</td>
<td>8,473</td>
<td>7,846</td>
<td>7,851</td>
<td>6,678</td>
</tr>
<tr>
<td>5. Compensation for customs collection costs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4,487</td>
<td>8,857</td>
<td>8,400</td>
</tr>
<tr>
<td>6. Compensation for sugar levy collection costs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>516</td>
<td>418</td>
</tr>
<tr>
<td>7. Excise duty adjustment to conform to EU norms</td>
<td>56,417</td>
<td>56,417</td>
<td>71,280</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Balance of payments (contribution + Traditional Own Resources) to EU budget and compensations | 131,720 | 117,397 | 121,097 | 124,166 | 16,034 | –120,248 | –118,093 |
| 7. Agricultural subsidy from domestic funds | 97,065 | 119,447 | 120,580 | 128,873 | 122,744 | 92,910 | 87,579 |
| Market access and agricultural production subsidy | 97,065 | 119,447 | 120,580 | 128,873 | 37,313 |
| Top up (accrual-based) | 85,431 | 92,910 | 87,579 |

| 8. Agricultural subsidies from EU funds | 78,502 | 123,451 | 145,925 |
| Export subsidies | 855 | 10,399 | 9,250 |
| Domestic market subsidies | 6,519 | 13,250 |
| Direct producer subsidies from the EU** | 77,647 | 92,910 | 102,175 |
| Costs relating to intervention*** | 0 | 13,623 | 21,250 |
| 7.+8. Total agricultural subsidies | 97,065 | 119,447 | 120,580 | 128,873 | 201,246 | 216,361 | 233,504 |

| B = 7–11# Savings in agricultural expenditures | 9,887 | –2,815 | –6,945 | –25,816 | –65,067 | –81,418 |
| In proportion of the GDP | 1.0 | 0.7 | 0.7 | 0.7 | 0.2 | –0.3 | –0.2 |

---

* Net customs revenue; A = -1.+2.+3.+4.+5.+6.+7.
** Accrual-based
*** Compensated by the EU
**** If the GDP-proportionate 2000 level had remained unchanged
# Difference between the actual amount of agricultural subsidy from domestic funds and Row 11

---

**Note:**

---

**Table 27**

<table>
<thead>
<tr>
<th>(million HUF)</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Contribution to the EU budget</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>119,721</td>
<td>186,645</td>
<td>199,182</td>
</tr>
<tr>
<td>2. Compensation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>42,813</td>
<td>8,458</td>
<td>7,669</td>
</tr>
<tr>
<td>3. Customs and agricultural duties</td>
<td>137,730</td>
<td>125,013</td>
<td>129,341</td>
<td>132,638</td>
<td>39,884</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. Administration costs of customs organisations</td>
<td>6,011</td>
<td>7,616</td>
<td>8,244</td>
<td>8,473</td>
<td>7,846</td>
<td>7,851</td>
<td>6,678</td>
</tr>
<tr>
<td>5. Compensation for customs collection costs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4,487</td>
<td>8,857</td>
<td>8,400</td>
</tr>
<tr>
<td>6. Compensation for sugar levy collection costs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>516</td>
<td>418</td>
</tr>
<tr>
<td>7. Excise duty adjustment to conform to EU norms</td>
<td>56,417</td>
<td>56,417</td>
<td>71,280</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Balance of payments (contribution + Traditional Own Resources) to EU budget and compensations | 131,720 | 117,397 | 121,097 | 124,166 | 16,034 | –120,248 | –118,093 |
| 7. Agricultural subsidy from domestic funds | 97,065 | 119,447 | 120,580 | 128,873 | 122,744 | 92,910 | 87,579 |
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| B = 7–11# Savings in agricultural expenditures | 9,887 | –2,815 | –6,945 | –25,816 | –65,067 | –81,418 |
| In proportion of the GDP | 1.0 | 0.7 | 0.7 | 0.7 | 0.2 | –0.3 | –0.2 |

---

* Net customs revenue; A = -1.+2.+3.+4.+5.+6.+7.
** Accrual-based
*** Compensated by the EU
**** If the GDP-proportionate 2000 level had remained unchanged
# Difference between the actual amount of agricultural subsidy from domestic funds and Row 11

---

The table shows that with the sole exception of 2001, the budget provided somewhat lower agricultural supports even prior to the EU accession, and after the EU accession it was possible to achieve considerable savings. We explain the decrease of domestic agricultural subsidies between 2000 and 2006 with the appearance of EU funds. Withholding agricultural subsidies from domestic funds diminishes expenditures due to the EU payments significantly, approximately halving them.

Two reasons were quoted to explain the changes in the VAT system in 2004 officially (i.e. in the budgetary closing accounts): EU law harmonisation and the need to maintain the budgetary equilibrium subsequent to the EU accession. Increasing the reduced 12% VAT rate to 15%, reclassifying the VAT rate of electricity from reduced 12% to standard 25%, and terminating VAT deductibility on subsidies relating to new investments and the non-wage operating expenditures of the general government are the measures to maintain the equilibrium of the budget, these measures generated a total surplus revenue of 137 billion HUF, which, according to our calcula-
tion, significantly exceeded the direct costs of the EU accession in 2004 and even in the next two years if we equate those costs with item B in the table. If we disregard the savings opportunities in agriculture and compare the above-mentioned VAT measures to item A, we find that they provided full coverage for the budget deficit directly deriving from the EU relation only in 2004.

### Table 28

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customs</td>
<td>-14.3</td>
<td>-10.6</td>
<td>-7.6</td>
<td>-95.2</td>
<td>-130.7</td>
<td>-130.0</td>
</tr>
<tr>
<td>Net budget transfers in the EU relation</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>-76.9</td>
<td>-177.7</td>
<td>-191.1</td>
</tr>
<tr>
<td>Excise duty rate adjustment to conform to EU norms</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>56.4</td>
<td>56.4</td>
<td>71.3</td>
</tr>
<tr>
<td>Savings in agricultural expenditures</td>
<td>-9.9</td>
<td>2.8</td>
<td>6.9</td>
<td>25.8</td>
<td>65.1</td>
<td>81.6</td>
</tr>
<tr>
<td>Nominal accumulated changes of the EU relation</td>
<td>-24.2</td>
<td>-7.8</td>
<td>-0.6</td>
<td>-89.9</td>
<td>-186.9</td>
<td>-168.2</td>
</tr>
<tr>
<td>Baseline scenario: maintaining a GDP-proportionate level</td>
<td>17.0</td>
<td>35.7</td>
<td>52.6</td>
<td>69.9</td>
<td>82.7</td>
<td>97.9</td>
</tr>
</tbody>
</table>

### Interest expenditures

All the data without any exception is derived from the budgetary closing accounts and other Ministry of Finance sources.

### Table 29

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maastricht debt</td>
<td>6 963</td>
<td>7 339</td>
<td>7 953</td>
<td>9 574</td>
<td>10 982</td>
<td>12 296</td>
<td>13 582</td>
<td>15 947</td>
</tr>
<tr>
<td>denominated in foreign currencies</td>
<td>2 861</td>
<td>2 852</td>
<td>2 601</td>
<td>2 418</td>
<td>2 663</td>
<td>3 216</td>
<td>3 995</td>
<td>4 528</td>
</tr>
<tr>
<td>denominated in HUF</td>
<td>4 102</td>
<td>4 488</td>
<td>5 353</td>
<td>7 156</td>
<td>8 319</td>
<td>9 081</td>
<td>11 419</td>
<td></td>
</tr>
<tr>
<td>Total net interest expenditures</td>
<td>611</td>
<td>597</td>
<td>619</td>
<td>703</td>
<td>825</td>
<td>844</td>
<td>841</td>
<td></td>
</tr>
<tr>
<td>net interest expenditures paid in foreign currencies</td>
<td>178</td>
<td>154</td>
<td>122</td>
<td>130</td>
<td>126</td>
<td>145</td>
<td>144</td>
<td></td>
</tr>
<tr>
<td>net interest expenditures paid in HUF</td>
<td>433</td>
<td>443</td>
<td>498</td>
<td>574</td>
<td>699</td>
<td>699</td>
<td>696</td>
<td></td>
</tr>
<tr>
<td>Implicit interest rate</td>
<td>8.5%</td>
<td>7.8%</td>
<td>7.1%</td>
<td>6.8%</td>
<td>7.1%</td>
<td>6.5%</td>
<td>5.7%</td>
<td></td>
</tr>
<tr>
<td>on debts in foreign currencies</td>
<td>6.2%</td>
<td>5.7%</td>
<td>4.8%</td>
<td>5.1%</td>
<td>4.3%</td>
<td>4.0%</td>
<td>3.4%</td>
<td></td>
</tr>
<tr>
<td>on debts in HUF</td>
<td>10.1%</td>
<td>9.0%</td>
<td>8.0%</td>
<td>7.4%</td>
<td>8.0%</td>
<td>7.5%</td>
<td>6.6%</td>
<td></td>
</tr>
</tbody>
</table>

Values according to the basic scenario calculated

### Table 30

<table>
<thead>
<tr>
<th></th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock-flow adjustment, basic scenario, without privatisation receipts</td>
<td>-362.44</td>
<td>-408.20</td>
<td>-449.30</td>
<td>-491.45</td>
<td>-522.60</td>
<td>-559.06</td>
</tr>
<tr>
<td>Total net interest expenditures, under baseline scenario</td>
<td>-14.17</td>
<td>80.01</td>
<td>89.06</td>
<td>138.20</td>
<td>-29.22</td>
<td>-82.00</td>
</tr>
<tr>
<td>Total deficit, under baseline scenario</td>
<td>611.6</td>
<td>629.8</td>
<td>653.8</td>
<td>677.0</td>
<td>703.4</td>
<td>714.8</td>
</tr>
<tr>
<td>Debt at the end of the year, with total deficit under baseline scenario, without privatization receipts</td>
<td>7 574.46</td>
<td>7 876.03</td>
<td>8 169.56</td>
<td>8 493.35</td>
<td>8 644.91</td>
<td>8 718.63</td>
</tr>
<tr>
<td>Average debt, with total deficit under baseline scenario, without privatisation receipts</td>
<td>7 456.95</td>
<td>7 725.25</td>
<td>8 022.79</td>
<td>8 331.46</td>
<td>8 569.13</td>
<td>8 681.77</td>
</tr>
<tr>
<td>Privatisation receipts</td>
<td>0.00</td>
<td>0.00</td>
<td>41.98</td>
<td>166.54</td>
<td>403.80</td>
<td>268.70</td>
</tr>
<tr>
<td>Debt at the end of the year, with total deficit baseline scenario, with privatisation receipts</td>
<td>7 574.46</td>
<td>7 876.03</td>
<td>8 127.58</td>
<td>8 326.81</td>
<td>8 241.11</td>
<td>8 449.94</td>
</tr>
<tr>
<td>Average debt, actual, with privatisation receipts</td>
<td>7 464.36</td>
<td>8 763.53</td>
<td>10 277.82</td>
<td>11 639.02</td>
<td>12 939.28</td>
<td>14 764.68</td>
</tr>
<tr>
<td>Debt at the end of the year, actual, without privatisation receipts</td>
<td>7 953.27</td>
<td>9 573.78</td>
<td>11 023.83</td>
<td>12 504.72</td>
<td>14 194.68</td>
<td>16 828.02</td>
</tr>
<tr>
<td>Average debt, actual, without privatisation receipts</td>
<td>7 646.36</td>
<td>8 763.53</td>
<td>10 298.81</td>
<td>11 764.28</td>
<td>13 349.70</td>
<td>15 511.35</td>
</tr>
</tbody>
</table>
The average debt stocks are calculated as the arithmetic averages of the respective end of year data.

<table>
<thead>
<tr>
<th>Effect of decrease of foreign currency interest rate</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of changes in interest premium</td>
<td>–24.73</td>
<td>–39.48</td>
<td>–89.05</td>
<td>–8.76</td>
<td>–27.76</td>
<td>–44.65</td>
</tr>
<tr>
<td>Effect of changes in the currency composition of the debt stock</td>
<td>11.40</td>
<td>31.10</td>
<td>39.08</td>
<td>52.16</td>
<td>43.98</td>
<td>42.33</td>
</tr>
<tr>
<td>Effect of GDP growth</td>
<td>73.16</td>
<td>147.54</td>
<td>220.60</td>
<td>303.30</td>
<td>355.49</td>
<td>406.90</td>
</tr>
<tr>
<td>Decrease of GDP-proportionate debt under baseline scenario</td>
<td>–63.57</td>
<td>–116.05</td>
<td>–162.14</td>
<td>–212.96</td>
<td>–242.44</td>
<td>–283.65</td>
</tr>
<tr>
<td>Effect of budgetary and political decisions</td>
<td>25.48</td>
<td>77.19</td>
<td>149.49</td>
<td>218.28</td>
<td>282.79</td>
<td>367.33</td>
</tr>
<tr>
<td>Effect of non-budgetary factors</td>
<td>5.38</td>
<td>16.31</td>
<td>31.58</td>
<td>46.12</td>
<td>59.75</td>
<td>77.61</td>
</tr>
<tr>
<td>Effect of privatisation revenues</td>
<td>0.00</td>
<td>0.00</td>
<td>–1.44</td>
<td>–8.88</td>
<td>–26.77</td>
<td>–42.51</td>
</tr>
<tr>
<td>Nominal accumulated growth of interest expenditures</td>
<td>–13.61</td>
<td>8.31</td>
<td>93.72</td>
<td>222.73</td>
<td>259.66</td>
<td>271.99</td>
</tr>
<tr>
<td>Baseline scenario: interest expenditures cleaned of the effect of political deficit increase</td>
<td>0.61</td>
<td>18.74</td>
<td>42.75</td>
<td>66.03</td>
<td>92.36</td>
<td>103.75</td>
</tr>
</tbody>
</table>

**NOTES**

1. Upon announcing the introduction of the adjustment package in the summer of 2006, the government officially forecast a deficit of 10.1%, and publicly announced that based on the calculations carried out at that point of time, the deficit would have amounted for 11.6% of GDP without the adjustment. Now the year in question is over, and in retrospect we find that the deficit did not actually amount to 10.1% but only 9.2%. It does constitute a problem what the deficit figure could have been without the adjustment program. As it was due to those types of revenues and expenditures that had not been affected by the adjustment package that the balance turned out better than expected, we assume that a deficit of not 11.6% but one that is 0.9 percentage point lower (i.e. of 10.7%) would have arisen based on the basic scenario.

2. The estimated value of the output gap was 0.81 in 2000 and 1.23 in 2006, which may cause a difference of a size of approximately 0.1 percentage point between the 2000 and 2006 deficits. However, it constitutes a serious problem that the production function-based method measures the effect of the output gap on the budget imprecisely as, firstly, it is not the cyclical changes of GDP but of the tax bases that the budget is directly influenced by, and, secondly, the method fails to take into account the impact of the budgetary policy on the economic situation, which, however, was rather significant in the period examined. (See Kiss, P. – Vadas: 2004 and Kiss, P. – Vadas: 2005.) A unified macro-fiscal model may provide the only proper solution in this case, too.

3. We only gained one-off expenditure items in respect of 2006 in this manner. Still, we thought that it would be a serious mistake to include the full, realised expenditures up until 2005. (For lack of data on actual service provision, no estimated service value is available.)

4. Logarithmic break-down is based on the following identical equation:

\[
\Delta T \cdot \prod X \cdot \Delta X = \Delta T \cdot \sum X + Y \cdot \Delta X = \Delta T \cdot \sum X + Y \cdot \Delta X
\]

5. Each letter could denote different categories depending whether they are included as a basic sign, in subscript or in superscript.

6. In this study, the terms ‘public sector’ and ‘government’ are used as synonyms, by which we mean public finance, in the legal sense of the word, this category includes local authorities but excludes state-owned enterprises.

7. The minus and the plus of the numerical results below should be interpreted from the point of view of deficit, this means that the impact on both the expenditure and revenue side is positive if it adds to the deficit and it is negative if it reduces it.

8. In practice, indexing takes place as follows: The Swiss index, which is used for the calculation of pensions paid from January to October, contains the ‘general’ consumer price index that is among the macro-economic assumptions of the budget bill; in October an official forecast is made relating to the
expected value of annual pensioners’ consumer price index and the National Health Service pays the corrected amount for the January–October period together with November’s pension.

9 However, it raised the debt stock, therefore its impact on interest expenses should be taken into account in 2006 (see the paragraph on interest expenditures).

10 There exists a special subsidy to patients entitled to nearly free or free national health service treatment that is not included in the medicine expenditures, their GDP-proportionate volume was nearly the same in 2000 and in 2006, and its fluctuation in this period was negligible.

<table>
<thead>
<tr>
<th>Year</th>
<th>Pharmaceutical expenditure for patients that receive medicines free of charge, excluding VAT</th>
<th>in % of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>21,713</td>
<td>0.16</td>
</tr>
<tr>
<td>2001</td>
<td>24,402</td>
<td>0.16</td>
</tr>
<tr>
<td>2002</td>
<td>29,266</td>
<td>0.17</td>
</tr>
<tr>
<td>2003</td>
<td>32,304</td>
<td>0.15</td>
</tr>
<tr>
<td>2004</td>
<td>35,134</td>
<td>0.15</td>
</tr>
<tr>
<td>2005</td>
<td>35,369</td>
<td>0.15</td>
</tr>
<tr>
<td>2006</td>
<td>36,369</td>
<td>0.15</td>
</tr>
</tbody>
</table>

11 Although the basic deal – the housing loan – exists for several years, the taxation rules may be changed every year, so it does not mean a several years commitment for the budget.

12 NA Zrt, and ÁAK Zrt are part of the statistical government sector, so the management of the state subsidies to the motorway construction works does not cause any problems.

13 MOL = Hungarian Oil and Gas, MVM = Hungarian Power Companies, MAV = Hungarian State Railways.

14 We do not consider as ‘negative’ savings or ‘expenditure’ the profit enhancing effect of the administrative price control.

15 We would like to note that the sale price of the Nuclear Power Plant of Paks has been much lower than the national average. As the power generated by the nuclear power plant could be sold – in theory – at the price of a power plant that operates with the highest costs, the relative loss created by the difference between the theoretical price and the “allowed” price for Paks could also be considered as a quasi-fiscal activity. Although we were unable to compile the complete time sequence for this, certain calculations indicate that the profit deterioration of the nuclear power plant was approx. HUF 80 billion in 2004, because of the cheap electricity. This also proves that the methodology of the calculation of the quasi fiscal activities may significantly influence the result.

16 The net operating profit is the difference between the gross operating profit and the depreciation. Surprisingly, the growth of depreciation is less than that of the gross operating profit, which results in the dynamic growth of the tax base. If the depreciation figures that are based on experts’ estimates regularly underestimate the real depreciation, this would cause too a high value of the other factor.

17 This component was in the range of 0.5–0.6 percent of the GDP in the examined period.

18 We do not undertake the examination of the effects of the legal tax rates, the limits of the categories and the changes in the distribution of incomes.

19 That only took place in the years 2004–2006 in accordance with the Treaty of Accession.

20 It can also be observed that the government has made certain efforts to counterbalance the overspending induced by itself through restrictions in other areas, this well explains the general public’s complaints against governmental restrictions despite the overall loose budgetary policy. However, these restrictive measures have proved largely insufficient compared to the extent of overspending.

21 Appropriations for tourism.

22 See Appendix B

23 Moreover, this data table contains net (i.e. values decreased by tax allowances) and not gross income tax data. We have no accurate data on the distribution of tax allowances between the private and government sectors.

**Literature**


István Csillag

Notoriously repeated budget policy

Since the end of the communist regime it has been an obvious, what's more a normal phenomenon in Hungary that public finances are never balanced. The only surprise might be that the rate of the deficit is not outstandingly high compared to the other transition countries in Eastern Europe. In this brief paper I will attempt to outline:

1. why Hungary has been unable to reduce the rate of the deficit at least to the Central European average;
2. what factors affect economic policy makers as a result of which the deficit – which is the consequence of their measures – becomes important for them only in case of external funding constraints;
3. if the budget deficit that has so far been regarded normal can be reduced by means of laws, by establishing the so called rules based budget policy and its institutional systems.

BUDGET DEFICIT: IS IT A NORMAL CONDITION FOR NEW DEMOCRACIES?

Since the end of the communist regime the balance of the central budget and – as a somewhat natural concomitant – the balance of general government has been negative. It has become customary to explain the fact that deficit became the natural condition right after the end of the communist regime, with transformation problems, such as the loss of revenue due to the liquidation of jobs and plants, (loss of tax-payers and tax revenues), and soaring tax evasions (more decentralised economy), as well as with the rapid growth in expenditures (costs of people squeezed out of the labour market). This explanation also made us cherish the benign assumption that after the period of transformation shock, the processes would converge towards the equilibrium, or at least the imbalance that was typical for the years of socialism, too, would no longer be accompanied by the current deficit of the general government. This assumption was based on the fact that the institutional system that dominated the period preceding the change of the social and economic regime lacked both the motive for sustainable and balanced growth, and the obstacle of the necessary force: the general public did not hamper the voluntarist economic policy. On one hand, the competing, multi-party system and parliamentary democracy prevent processes from being concealed, revealing the consequences of the unfavourable, balance deteriorating economic policy, on the other hand the alternative economic policies represented by the competing parties guide the budget towards the state of balance, and finally, the requirements of the legal state: the process of budget planning and execution that meets the require-
Five election cycles have passed since the change of the regime, wherefore being in possession of sufficient empirical experience we can state that the assumption about the beneficial impact of parliamentarism has not come true in Hungary. The parliamentary parties in power have made attempts to reduce the public finance deficit when in the absence of sufficient domestic savings they have encountered an external funding constraint that could not even be offset by non-debt generating capital influx: the high deficit of the balance of payments (which was not offset by capital influx), i.e. the unfavourable rating by foreign markets and funders.

This Hungarian phenomenon that occurred after the end of the communist regime, was not at all different from the experiences of the other new democracies. What is more, it did not differ either from the experiences of the developed countries after the oil crisis, which could be regarded as the premonition of the globalising world economy. Since the appearance of the public choice school literature has taught us that in order to obtain and hold on to power, politicians make use of the fiscal illusion of “lay” electors. Politicians capitalise on the fact that electors overestimate the current benefits of increasing governmental expenditures and tax reductions, while they underestimate the future costs of eliminating the budget deficit arising from the popular measures, the future growing tax burdens, and the rampant inflation. Alesina and Perotti also described five known methods to systematically maintain the fiscal illusion. These methods range from the optimistic forecasts of macroeconomic processes through the assessment of the efficiency of adjustment measures, and off-budget expenditures reducing transparency, to the failure of making the necessary tax correction that keep pace with inflation, or to multi-year budgeting instead of annual budgeting.

Without the detailed presentation of the new developments of the Hungarian budget policy here, it is evident that during the hardly one and a half decade long history of parliamentary democracy Hungary has managed to apply all methods mentioned in Alesina’s and Perotti’s excellent work published in 1996. One of the explicit objectives is not to master the manipulation techniques of developed democracies, but to study the increased application thereof in Hungary throughout several government cycles. This work is greatly facilitated by the comparative studies recently performed by Brander and Drazen (2005–2006), for their study issued in April 2006 contains especially interesting statements for Hungary. Already the title contains certain implications for us: How Do Budget Deficits and Economic Growth Affect Reelection Prospects? The most important conclusion drawn from the election cycles of over 74 countries between 1960 and 2003 (347 campaigns) is that there is a striking difference between the economic policy characteristic for the new democracies (between the economic policy, especially the budget policy reactions characteristic for the first four election cycles following the transition to democratic parliamentarism) and the economic policy of established democracies (reactions throughout the entire period under survey, i.e. from 1960 through 2003, or over a longer period than the first four election cycles). As long as “…voters … in… established democracies do not like deficits, particularly in election-years” (page 20), what’s more, “…deficits are punished in old democracies” (page 17), “…in the new democracies … we find no … effect of the fiscal balance on the probability of reelection.” (page 18)

It is also interesting that although voters value better macroeconomic performance both in the new and old democracies, however, in the developed democracies the economic successes of the country are not regarded as the
outcome of better government performance, wherefore in those countries GDP growth has no effect on the probability of reelection. (See Figure 1) In less developed countries – not necessarily new democracies – however, balanced, good economic performance and high GDP growth rates have a significant effect on the probability of the government’s reelection.

Unfortunately, their papers do not contain conclusions that are specifically valid for the transition countries of Central and Eastern Europe. Although the figures of Eastern European countries were also processed, due to the shortness of time series, which do not meet the criteria selected in the paper (at least four election cycles) the transitional European countries are not included as a separate group in the tables supporting the conclusions about the new democracies. For the lack of conclusions specifically valid for the transition countries of Central Europe I refer to the authors’ findings only as the closest analogy, since I believe that their conclusions hold true for Hungary, too. There are two other conclusions that are especially edifying: according to them the probability of reelection is improved by the robustness of economic growth, while deficit – although this is primarily a neutral factor in the new democracies – lowers the probability of reelection if its inflation generating features are apparent.

In Hungary only one government has been reelected. In the year of reelection the public finance deficit was the highest since the political turnaround (over 10% of the GDP), and was relatively high during the previous term of the Government (on average 6% of the GDP). However, it is a fact that the term of the previous Orbán-Torgyán administration was characterised by gradually decreasing economic growth. In the period between 1998 and 2002 one could also witness the highest growth rate achieved since the change of the political regime. (2001 Q1: 6.5% of the GDP). Since then, however voters could witness gradually and continuously deteriorating economic performance, for one decade after the transformation (1990–1992), the Orbán administration left diminishing economic growth (2.7%) to the election year (2002). The Government that took office in 2002 set out from this low level, and albeit with occasional halts it gradually reached a growth of around 4%, which seemed relatively steady. Inflation on the other hand, largely due to the tax cuts of 2006 that consequently led to the high deficit, dropped to the
lowest level in the election year (2006) since the change of the regime. If we rely on the conclusions of the above cited excellent paper about the election cycles we may see that Hungarian voters decided – being caught up in the fiscal illusions, and in full accordance with the international experiences, and also irrespective of the politological correlations not discussed here – to reelect the coalition in power since 2002.

No matter how “welcome” it is that Hungarian voters were caught by fiscal illusions in the same manner as those in new democracies (Brander – Drazen, 2006), this is not a sufficient explanation for the long-term budget deficit. From this point of view it is not enough to reiterate that the Hungarian political class extremely quickly mastered the manipulation techniques – discussed in the study by Alesina and Perotti – suitable to systematically generate fiscal illusions. Other factors also contributed to the formulation of the economic policy trend that causes the budget deficit.

HELD CAPTIVE BY “GOULASH COMMUNISM” AND THE “PREMATURE WELFARE STATE”

After the end of the communist regime, the Hungarian budget policy was unable to give up consumption maintained at an artificially high level by budget means dictated by “Goulash Communism” and the “premature welfare state” (János Kornai) providing substantial subsidies. These two were accompanied by the prudent reform policy “tested” by János Kádár (chief secretary of the Communist Party), as well as the preservation and gradual modification of the characteristic framework conditions, which is also known as “gradualism”. Without entering into a politological discussion, I would like to refer to the competition of the Hungarian election programmes, and the outcome of this competition. Since 1990, the tendency has persisted that the general public prefers the programme of that political party that announces gradual transformation while maintaining the consumers’ consumption level and the welfare services, irrespective of the fact that it leads to severe public finance deficits or greater dependency on the state.

Analyses of the conditions of existing socialism show that as a result of the Hungarian revolution of 1956 consumption and state welfare services were at an incomparably higher level than in other socialist countries at a similar stage of development, and the maintenance of which occasionally ran into external funding constraints. The lack of transparency of public finances was astounding even in comparison with the secrecy of data pertaining to the assessment of the external balance. This explains that Hungary could become the classic country of twin deficit only in the 1990s, after the change of the regime, although all prerequisites had existed since the late 1960s. The substantial and still lingering effect of this period is that voters are unimaginably sensitive to the decline of their consumption level and to losing the conditions “protected” by the welfare systems.

This “basic voter’s instinct” is strengthened by the established “stepping order”, i.e. the gradualism of economic changes in Hungary. This prolonged action that pushes the break with the former typical behaviours to the future in an uncertain manner instead of implementing radical and drastic changes leads to the fact that the force of resistance to the necessary changes is similar as in the case of radical changes, but the force and intensity of the expected and perceptible outcomes are negligible. This can explain why they are relatively easy to revert, and why they lack efficiency. This can be illustrated with the fact that the major objective of the last Hungarian public finance reform, the pension reform, i.e. the
restoration of the balance of the pension fund has been characterised by an enormous deficit within less than a decade after the reform. One of the explicit objectives of the pension reform in 1997 was to create the harmony between the contributions (payments) and benefits, and potential benefits. The reform seemed to be very successful for a few years (until about 2000). However, the cushioning of the changes back then (e.g. the prolonged and gradual raise of the retirement age, the lack of prohibition of changing contributions and benefits without comprehensive, transparent and controlled calculations) and the lack of a rule that would prohibit political bias deteriorating the balance of the pension fund, could not restrain the munificent government. As a consequence, within less than a decade (according to the calculations of the National Bank of Hungary), the implicit debt of the pension system has by now become more than twice as big as the explicit state debt, i.e. the pension fund is in fact in a much worse condition now than it was before the reform.6 In contrast with this, the radicality of reforms implemented in the neighbouring Slovakia is indicated by the fact that the standard, flat-rate tax system lacking all sorts of discounts, and the health insurance system based on the competition of health insurance funds were not changed by the socialists who came to power (despite their promises), since the effectiveness of these measures was tangible and convincing especially due to the radical nature of introduction and the sweeping effect of the coerced changes.

Table 1 clearly shows that there is some correlation between quick economic growth and the redistribution function of public finances. The greater the income redistributed by public finances, the lower the growth rate of the economy. Although the attached table presents the processes of a few years only, the presented five years make it possible not only to compare the different countries, but also to observe the consequences of the economic policies implemented within one country in different periods. We also know that between the millennium and 2005, the redistribution function of public finances grew not only in Hungary, but also in Poland and the Czech Republic, for instance. Public finance expenditures grew proportionately to the GDP which increased the public finance deficit instead of accelerating economic growth. We were aware of the impacts of this well-known correlation, but have been unable to present them in such a plastic manner. (See the examples of Bulgaria, or Latvia on the other end of the spectrum.) The table also shows that Hungarian public finance expenditures were outstandingly high.

<table>
<thead>
<tr>
<th>GDP growth</th>
<th>Budget deficit as a percentage of the GDP</th>
<th>Budgetary expenditures as a percentage of the GDP</th>
<th>Primary deficit as a percentage of the GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>5.4 5.6 5.5 6</td>
<td>–0.5 1.9 3.1 3.3</td>
<td>n.a. 38.7 37.3</td>
</tr>
<tr>
<td>Estonia</td>
<td>10.8 8.1 10.5 10.9</td>
<td>–0.2 2.3 2.3 2.5</td>
<td>36.5 34.2 33.2 32.3</td>
</tr>
<tr>
<td>Hungary</td>
<td>5.2 4.9 4.2 4</td>
<td>–3 –5.3 –6.5 –10.1</td>
<td>46.5 48.8 49.9 51.7</td>
</tr>
<tr>
<td>Latvia</td>
<td>6.9 8.6 10.2 11</td>
<td>–2.8 –0.9 0.1 –1</td>
<td>37.3 35.8 36 39.5</td>
</tr>
<tr>
<td>Lithuania</td>
<td>4.1 7.3 7.6 7.8</td>
<td>–3.2 –1.5 –0.5 –0.1</td>
<td>39.1 33.3 33.6 34</td>
</tr>
<tr>
<td>Romania</td>
<td>2.1 8.4 4.1 7.2</td>
<td>–4.6 –1.3 –0.4 –1.4</td>
<td>40.6 38.3 38.3 38.8</td>
</tr>
<tr>
<td>Serbia-M.</td>
<td>5 7.2 n.a. n.a.</td>
<td>n.a. n.a. n.a. n.a.</td>
<td>n.a. n.a. n.a. n.a.</td>
</tr>
</tbody>
</table>

Source: Eurostat
compared to the GDP, which sufficiently clearly indicates the typical high rate of state dependency in Hungary, the gist of the Hungarian phenomenon called “Goulash communism”.

However, abstention from the radical changes aimed at the elimination of the public finance deficit does not explain the policy that led to the deficits. On the other hand, “Goulash communism”, and the institutional system of the “premature welfare state” functioning within its frameworks, as well as the burdensome nature of this premature welfare state on the expenditure side of public finances, have an explanation that can be derived there-from: tax evasion and the unimaginable depth of “free riding”. It is a well-known fact that out of Hungary’s 10 million citizens less than 4 million (4.9 million) citizens pay taxes, and from among them only 3.6 million people pay health insurance and pension contribution. It is worth adding that the number of employed people (those who work at least 2 hours per week according to statistical standards + registered job seekers) is less than 4 million. It is also a known fact that the number of employees registered as minimum wage earners is extremely high (1.6 million). Based on tax evasion and the high number of free riders, in terms of the budget policy to be followed I refer to the only conclusion that can be drawn from the statistics: only that political programme receives the majority of the votes that does not affect the ratios influencing the established attitude of the voters.

Attention to these ratios was drawn by János Kornai7 in a study of his published in 1995. Kornai started to apply the model developed by Assar Lindbeck, the famous Swedish economist to the Hungarian society. In the 1970s, Assar Lindbeck started to study how the famous Swedish welfare state changed the basic structure of the Swedish society, to what extent wide layers of the Swedish society became dependent on state redistribution. Applying Lindbeck’s model to Hungary, using the Hungarian statistical figures, Kornai found that in Hungary some social groups are even more dependent on state redistribution. By supplementing the figures of the table presented in

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number of participants (thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Public administration and public services</td>
<td></td>
</tr>
<tr>
<td>2. Pensioners</td>
<td></td>
</tr>
<tr>
<td>3. Unemployed</td>
<td></td>
</tr>
<tr>
<td>4. Participants of labour market programmes</td>
<td></td>
</tr>
<tr>
<td>5. People on sick leave</td>
<td></td>
</tr>
<tr>
<td>6. People on maternity leave</td>
<td></td>
</tr>
<tr>
<td>7. Total 1 through 6</td>
<td></td>
</tr>
<tr>
<td>8. Employees in the market sector</td>
<td></td>
</tr>
<tr>
<td>9. 7/8 (percent)</td>
<td></td>
</tr>
</tbody>
</table>


Kornai’s study published in 1995–1996 with figures for 2004 I found that instead of fading away, dependency on state redistribution became a massive phenomenon in ten years.

This conclusion seems justified by the table prepared on the basis of the Kornai (Lindbeck) method. Especially this is why some people claim that the munificent economic policy in effect since the millennium has become the streamline policy of both large socialist parties following the populist economic policy, which in this sense strengthens redistribution, since the hidden understructure of the Hungarian society and economy got distorted to an unbelievable extent during the consolidation in the Kádár era and the subsequent decades. They argue that the ratio of people who receive their incomes not from the market, but primarily from state redistribution, is higher than in any other European country. The ratio of people living on market or non-market income reached extreme proportions by international comparison as early as in the 1970s. This ratio has got further distorted due to declining employment that appeared as a side effect of economic and social restructuring. After the collapse of the large state companies and market organisations (1990–1993) the proportions got further distorted, since at the end of the 1980s as much as 85% of the employees received their incomes from market organisations. This ratio has by today decreased by nearly 10%, to 78%. Table 2 presenting the situation in Sweden and in Hungary gives a clear view about the differences.

In the early 1980s the ratio of people receiving labour or entrepreneurial income (market sector) to people with income from redistribution by the state was nearly 50 to 50%. According to research conducted by János Kornai, this ratio changed to 1 to 1.65% by 1993, to the benefit of people solely living on income from state redistribution. Slow consolidation improved this ratio to 1.47 by 2004.

Due to this extremely high ratio of people with non-market income the existence of “free lunch” has become natural, what's more, it is unimaginable that one should pay for “lunch” at all. The proportions also show that we must establish a very specific institutional background and restructuring schedule to set a clear direction for budgetary adjustment, so that the feature typical for democratic countries, i.e. austerity and solidarity with those really in need should manifest itself in the use of taxpayers’ money.

The high ratio of people with non-market income has also led to the fact that not only market income, but also the natural expectations that we have got accustomed to in relation to services available on the market are lacking in relation to services and benefits funded from the budget, i.e. from public finances. “Don’t look a gift horse in the mouth,” claims the Hungarian saying. The fact that voters are interested in maintaining the current practice of state redistribution, and the low rate of tax and contribution payers explains not only the permanently high public finance deficit. The astounding depth and power of the free rider attitude also contributes to the preservation of the permanently high public finance deficit, as a result of which the utilisation of expenditures is inefficient, and the avoidance of cost-benefit type correlations and the value for money requirements become the dominant voter behaviour and an economic policy approach.

The extremely high ratio of people interested in sustaining state redistribution is one of the political economic explanations for why the Hungarian economic policy returned to the stop-go economic policy of the Kádár era after the millennium, why has the fiscal attitude leading to high budget deficits and high public debts become recurrent: a relapsing fiscal alcoholic, using the snappy expression coined by George Kopits.
COALITIONS FOR VOTE TRADING

The constitutional system of the Hungarian transition was shaped by the so called “legal state revolution” fought within the framework of the so called round table talks. The specific feature of this is the uniquely mixed election system, which most often forces the establishment of coalition governments due to the relative balance between the political forces. All five governments that have come to office since 1990, i.e. the change of the regime, have been coalition governments. It was possible only in one single case, in 1994 for the party that obtained the majority of the votes to form a government in the National Assembly by itself. Parties forming the coalition governments usually rely on the votes of different groups of voters, and promise the implementation of programmes prepared for the fulfilment of different voter demands.

Parties of a coalition government try to harmonise the election programme promises made for the different groups of voters on one hand, and confine them to the frameworks of funding resources available for implementation. This harmonisation is a rather complicated political task, and implies especially severe consequences for the economic policy to be followed if the coalition is made up of parties that usually prefer hanging around – in the figurative sense of the word – at the contribution and payment desks of the budget, respectively. The budget is threatened by the coalition of parties embodying so different voters’ interests at each stage of governance, but such coalition is especially dangerous for the budget of the first and last year of governance. In the “opening year” the parties “send a message” to their voters with their initial measures and first budget proposals as per which of them can keep the promises made to the voters: which of them “can be better seen” behind the coalition shield. The budget is jeopardised to an equal if not greater extent in the last year of coalition governance, i.e. during preparation for the elections when the issue is again addressing each party’s own voter base.

It is no wonder that in Hungary in all coalition governments except for the one in power between 1994 and 1998 the coalition parties fought tooth and nail to retain their voter base and buy uncertain voters with budget-burdening promises without bothering about the budget deficit, i.e. the consequence of the fulfilment of their promises. In Hungary there is no tradition of non-party affiliated, expert institutions helping voters by presenting the expected impacts of the election programmes on the budget. In the light of the promises made during the last three election campaigns (e.g. in 1998: 400% pay rise for physicians; in 2002: 800 km long new motorway, 13th month’s pension; in 2006: reduction of the social security contribution by 10%, 14th month’s pension, etc.) it would be very important to have such a tradition.

Based on the promises made for the purchase of voters, and then on the internal tensions of coalition governance it is becoming clear that it is very necessary to present the impacts of the promises on the budget in an independent, non-partisan and credible manner, using internationally accepted measurement and forecasting methods. When in 1998, upon the request of the prime minister then in office, the National Bank of Hungary prepared an analysis about the costs and possible impacts of the programme of the opposition party Fidesz on the budget, it made a mistake not by doing so, but by restricting such analysis to the programme of Fidesz, and by not extending it to all the other political parties. On the other hand, it made a mistake by not disclosing its opinion about the programmes of all political parties. The excellent research and analysis staff and the credibility of NBH could have laid the foundations for the practice that could have served the protection of the general public and
the budget. No wonder that in other countries of Europe such practice exists and such task is performed by authentic institutions in a non-partisan manner. As it is known, one of the important and acknowledged tasks of the Dutch planning and development institute established by Tinbergen is to form an opinion about the programmes of parties running in the coming elections. A decent party can run in the elections only if it subjects its programme to opinion-forming by this prestigious and credible institution. Based on the opinion of this institute voters may learn about the risks that threaten their wallets in case this or that party comes to power due to the necessary tax hikes or the expected inflationary consequences.

If there were such a non-partisan and authentic expert opinion institution in Hungary, the competition of promises – which undermined the budgetary position – could have been evaded in 2002. Perhaps this could have forestalled the full-scale implementation of those promises that concurrently undertook to radically increase welfare expenditures and public sector wages, significantly reduce taxes, realise robust community investments compared to the previous period, as well as to endure the consequences of Hungary's accession to the EU (payments made and loss of customs revenues). Each of these measures decreased budget revenues by 2% of the GDP (tax cuts – around 2%, loss of customs revenues due to accession to the EU, loss of excise duties and VAT after accession – around 1+1%). On the expenditure side 4 to 4.5% more money was spent on welfare services and wages, including: pay rise for public employees and civil servants – around 2 to 2.5%, 13th month pension – another 1%, increased social transfers – 0.6%, radical growth in interest subsidies on housing loans – around 0.5%. This situation is aggravated by the excess costs of accelerated motorway constructions – around 0.6 to 1%, and finally items that were formerly accounted as off-budget items (e.g. the one-off costs of the rescue schemes for the Hungarian Development Bank, motorway construction, the Hungarian Railways and the Budapest Transport Company), each 3 to 3.5% of the GDP. The interest hike that offset these items “deteriorating” the primary budget balance increased the deficit by at least 0.8 to 1.5% of the GDP too. Even if we do not “admit” the one-off items of liabilities generated in the period between 1998 and 2002, the deficit grew by around 9% of the GDP due to the fulfilment of the promises, which was not compensated by the portion of the average economic growth of 3.5 to 4% channelled to public finances. This was especially due to the fact that the inherited deficit was also climbing towards 4% of the GDP.

Especially due to the special dividedness of the Hungarian election system and voters (see the dependency rate mentioned in the previous chapter: i.e. market income recipients that are consequently interested in tax cuts versus people obtaining income from state redistribution that are interested in raising taxes) it would be necessary to force parties running in the elections to present the budgetary impacts of their programmes before the elections. Then this budget analysis could be inspected by independent, authentic and non party-affiliated institutions that should in turn make their opinion public.

I do not think that in the other transition countries of Eastern Europe (for example in Poland or the Czech Republic) independent institutions analysed the impact of party promises aimed at “stupefying” voters, or the implementation costs thereof on public finances. However, by comparing the public finance processes, especially the deficits, we can conclude that the above mentioned countries were more successful in getting rid of the tools used for stupefying the voters. As we can see from the processes that took place in these three countries, Hungary established a regular election
cycle characterised by increasing public finance deficit, and – what is more severe – by the stabilisation of this deficit at a high level (at least at 6% of the GDP), and in the periods of elections even greater fluctuations can be observed. Between 2001 and 2003, Hungary’s two competitors also experienced the impact of election promises and the expansion of subsidies on the deficit. Yet, Poland and the Czech Republic could reduce the deficit to an acceptable level by introducing a legal obligation voted both by the opposition and the government (Poland) and by introducing a sober, restrictive economic policy (Czech Republic). (See Figure 2)

From the comparison of the three countries we can see that while in the Czech Republic and Poland the public finance deficit could be reduced to the “normal level” after the initial year of the election cycle with a more disciplined line of economic policy actions, Hungary failed to do so in the period between 2000 and 2006. What is more, instead of the former deficit of 3 to 5% relative to the GDP, the “normal level” of public finance deficit prior to the election campaign became 6 to 8% of the GDP, which can only be cut back by withholding the entire aggregate demand even under the conditions of the international markets abundant in cash.

THE ART OF BREAKING THE MUNIFICENCE OF THE STATE

The emergence of high general government deficit is attributed to structural causes in Hungary. Among these causes I first of all reiterate the exceptionally high rate of state redistribution, which at the end of 2006 exceeded 50% of the GDP (52.1%).11 This ratio is much higher than the average ratio of 40% measured in the transitional countries of Central Europe, and is also by far larger than the 44% achieved in 1999 after 5 years following the introduction of the so called Bokros package (which meant an improvement of nearly 14%).12 The high rate of
redistribution is the consequence of the steadiness of the so called “dependency ratio”, which indicates the high ratio of citizens living on state income as described by Kornai and Lindbeck. Without the radical modification of these structural causes any change introduced in budget preparation, planning and execution – i.e. in the institutional frameworks of the budget policy – is a necessary but not sufficient condition for the elimination of the high budget deficit.

The institutional frameworks of the budget policy could yield long-standing results only in those countries (Sweden, Finland and Chile) where the institutional changes (laying down the objectives in the form of legal standards = rules-based budgets, tightening of the rules for planning, execution, modification and reporting procedures, reinforcement of the transparency requirements, reinforcement of the economic foundation of planning by means of independent, competing expert assessments, etc.) were combined with permanently implemented, balance maintaining economic policy objectives. The well-foundedness and consistency of macroeconomic assumptions, the logical order and unbreakability of the procedural rules, the specification of and adherence to new rules in relation to the continuous transparency of the entire budget process13 – which yielded measurable results in several countries of Latin America – are exemplary for Hungary, too.

The requirements of institutional changes must be laid down in the new act on transparent public finance responsibility and the frameworks of public finance management between 2006 and 2015, which may contain requirements for:

• the rate of the positive primary budget balance to be enforced in the next 10 years (at least 2% of the GDP), without the well-foundedness of which the budget cannot be submitted to the National Assembly;

• the obligation according to which surpluses (savings) realised in the case of higher than planned budget revenues, or lower than planned budget expenditures can exclusively be used for reducing the deficit and improving the balance;

• state redistribution and public debts should be reduced below 40% and 50% of the GDP, respectively. This shift in proportions shall be achieved within the timeframe (deadlines) specified by the law, at least at an even pace of reduction, except for the periods of boom;

• the upper, GDP proportionate limit of primary budget expenditures, which shall be reduced by at least 1% each year;

• restoring the self-funding ability of certain public finance subsystems (central budget, social security funds, separated state funds, local governments);

• the chapter balance reserve formation in the amount of at least 1% of the GDP until the requirement pertaining to state redistribution (40% of the GDP) and public debts (50% of the GDP) is met;

• the quantification of the budgetary effects of the programmes of the parties running in the elections, and the control of such effects by non-party affiliated expert institutions (e.g. State Audit Office, National Bank of Hungary)

• in the case of macroeconomic assumptions serving as the basis for the budgets of next years (at least three years), the need for comparing the assumptions of at least three research institutes;

• opinion forming on the processes assumed in the submitted draft budget from the economic prospective by the Budgetary Expert Council working under the State Audit Office;

• the tightening of the modification of approved budgets, including the requirement for the submission of a supplementary budget in case the modification exceeds 2% of the gross sum of the budget14;
• meeting the requirement pertaining to the full publicity and continuous availability of information on budget planning and execution processes in line with the standard international statistical rules;

• economically expanding the room for manoeuvring for the individual budget chapters within the budget (responsibility), but in case of deviation from the plan, the obligation of increased balance reserve formation shall be met (100%, i.e. a balance reserve equalling at least 2% of the GDP shall be formed in case of significant /5 to 10%/ deviations from the plan).

Apart from the modification of the above institutional frameworks, restoration of the public finance balance also requires adjustment measures (increasing revenues and reducing expenditures within the frameworks of the convergence programme), and reforms that compel a change in attitude. The impact of structural causes wear off, a radical change in “deficit production” occurs when direct interest in this, i.e. dependence on state redistribution subsides.

If the hands of the political class were tied by the rules specified in the acts, and therefore the reduction of the deficit, state redistribution and the high public debts would be a long-standing political obligation of the successive governments and their oppositions, the probability of the implementation of structural adjustment would increase by several orders of magnitude.15 Obviously, these restructuring requirements removed from the political competition by force of law can be further reinforced with other legal technical tools (e.g. by inclusion among acts to be passed with a two-third majority). Actually, this may even be necessary based on the Polish examples. I would be content if the current government coalition decided on such a modification, because I find it too “risky” that the opposition would set the loosening of budgetary discipline as an attractive objective in the election battle. And if the representation of masses interested in deepening the state redistribution is not possible while maintaining the budget deficit and preserving the redistribution rate in the legal and legitimate form, this may somewhat ease the pressure on the political class, which may gradually lead to the fact that the incessant reforms modify the dependency ratio, and hence the main indicators of the macroeconomic structure.

Notes


LITERATURE


ANTAL, L. (2002): Hungarian economic policy in the 1990s and sustainable growth, Budapest, Table 15 Redistribution by the state as a percentage of the GDP based on EBRD’s figures (1994–1999)


Ministry of Finance: The Budget Bill of the Republic of Hungary for 2007. Summary statistics of the government sector (according to ESA 95)

Antal, L. (2002): Hungarian economic policy in the 1990s and sustainable growth, Budapest, Table 15 Redistribution by the state as a percentage of the GDP based on EBRD’s figures (1994–1999)


Ibid


Stabilisation and 18 months of the reforms, *Global Knowledge Foundation*, April 2006, Table 8


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Similarly as in most Central and Eastern European EU accession countries, Hungary has experienced rapid economic growth in recent years. Over the period 1997–2002 GDP growth averaged 4% per year, around 2 percentage points above the EU average. If maintained such a difference would lead to a closing of the gap between Hungarian per capita GDP and average EU per capita GDP of 37% in 2005 in some 25 years.

THE NEED FOR INSTITUTIONAL REFORM

Whereas the private sector in Hungary is prospering and general economic conditions are healthy, the general government sector is not under control. The general government deficit on ESA basis increased from –2.8% to –9.4% GDP from 2000 to 2002. In the first years after the elections of 2002, the government has succeeded in partly redressing the situation, reducing the deficit to 5.4% GDP, but in the advent of the elections of 2006, the deficit surged again to a level of 6.1% in 2005. Since the beginning of the century the government has announced plans to reduce the deficit to acceptable levels. The EU pre-accession programme 2002–2006 aimed at a deficit of less than 3% in 2005, the EU convergence programme 2005–2008 established in May 2004 after EU entry aimed at reaching the 3% band in 2008. The December 2004 update of the EU convergence programme even aspired to reach the 3% band in 2007. A year later the December 2005 update postponed the attainment of this level again to 2008. According to the estimates of the European Commission in reality the deficit is increasing since 2004 and will reach a level of more than 7% in 2007 on the basis of pre-elections policies.

Hungarian budget policy over the last decade has been characterized by strong electoral spending and insufficient efforts to redress the situation after elections. For instance in the run up to the elections of 2002 under a centre-right cabinet, a series of large wage hikes was decided, culminating in a 55% salary increase for army officers in January 2002 and a 50% wage increase for all public servants in September 2002. In the run up to the elections of 2006, under a centre-left cabinet a comprehensive five-year tax cut package was adopted in 2005 amounting to a revenue loss of 1% of GDP in 2006. In addition social expenditures in the sphere of pensions and family benefits were extended amounting to an expenditure increase of 1.6% of GDP in 2006. This general pattern of budgetary development has not been much different between cabinets of
different political orientation although the spending and tax relief priorities have been slightly different.

Against this background it is remarkable that budgetary policy has become highly politicized in Hungary. After the recent elections in which the centre-left coalition has maintained its majority, the opposition has severely criticised the cabinet for its failure to put the deficit under control. The political turmoil has even increased after an admission by the prime minister that his cabinet had done little to steer the budget in the right direction. The public outcry that this admission caused, not only among the supporters of the opposition but among the public at large, is the more remarkable because the facts about the Hungarian budget, as well as the criticism of budgetary policy by the European Commission, the IMF and the OECD were since many years in the public domain and could have been known and highlighted by the opposition and the media at any time in the last few years. It is as if politicians have suddenly decided to use the shortcomings in budgetary policy to blame each other whereas it is well known that both camps, when in power, have hesitated to take the necessary measures.

It is important to note however, that there is nothing particularly Hungarian about this course of affairs. Political economists have argued since long that politicians in representative democracies are subject to incentives that may lead to less than optimal economic results.

In the public sector there is no invisible hand that steers decision-making in the direction of the general interest. Two of the most important causes of government failure that have been identified in the area of budgeting are known as the common pool problem and universalism. What is somewhat different in Hungary as compared to many other OECD countries, is that until now Hungary has not yet established sufficient institutional barriers to block certain avoidable forms of government failure. These institutional barriers should be distinguished from budgetary policies. This paper will argue that the present budgetary problems in Hungary are not in the first place due to wrong or irresponsible budgetary policies but rather to shortcomings in the institutional set-up of the Hungarian budget process. This argument assumes that it makes little sense to blame politicians for actions that prevailing institutions allow and from which they can not refrain without being punished in the political arena.

The importance attached to the distinction between budgetary policy and budgetary institutions is characteristic for the analytical approach of political economy. In this approach the motivation of actors such as politicians and bureaucrats is assumed as given. Reform proposals focus on the change of institutions and are assessed in the light of probable behavioural consequences in the light of given motivational assumptions. In practice institutional reform mainly proceeds on the basis of trial and error. Lessons are learned by bad experiences and practical considerations guide the proposals for innovations. Furthermore countries are looking at each other’s experiences and organisations such as the OECD and the IMF disseminate information on “best practices”. The perspective of political economy may add to the understanding of the problems and the effectiveness of the proposed solutions and thus contribute to the reform effort.

BUDGET POLICY AND INSTITUTIONS

In the area of budgeting the distinction between institutions and policies is not always evident. Sometimes it is thought that institutions refer to rules and policies to unique decisions, but this criterion is not always applica-
ble. Indeed there are various types of institutions and various types of policies. For the purpose of this paper it suffices to pay attention to institutions that can be labelled as competence rules. These rules describe the competences and obligations of the public authorities who are responsible for the enactment, execution and control of the budget. This paper will focus in this connection on the budget of the central government as opposed to the budgets of sub-national governments. Roughly speaking these competence rules can be found in the organic budget law, that most central governments have established, but some of them may not be included in that law. The latter often applies to two sets of competence rules that are particularly important from the perspective of this paper, namely the budget time table and rules of budgetary discipline.

Whereas institutions are always rules, applicable to all cases that satisfy the conditions stated in the rules, budgetary policies may apply to unique cases but may also be rules themselves. Budgetary policies in the strict sense are usually conceived as decisions concerning the budget, in particular authorizations to make expenditures, to collect revenues and to borrow in a particular year. However, many of such authorizations are materially provided in substantive laws preceding the enactment and execution of the budget. For instance, at the revenue side of the budget, the tax laws materially authorize the collection of tax revenues. Similarly, at the expenditure side, many social benefits are materially authorized in so-called 'entitlement laws' which establish claims to receive public services on the part of citizens, regardless of subsequent budgetary authorization. In many countries, including Hungary, important expenditures for entitlement benefits, are not formally part of the budget, namely social security benefits and health benefits. In all these cases the substantive laws that materially authorize revenue collection, expenditures and borrowing, will be considered as budgetary policies in a broad sense, even though they apply to rules rather than decisions for unique cases.

Summarizing, the distinction between budget institutions and budget policies is based on content rather than on the generality of the decision. Budget policies are decisions that authorize revenue collection, expenditures and borrowing, regardless of whether these authorizations are comprised in a budget law in formal sense. Budget institutions are rules that define the competences and obligations of the authorities that are responsible for the enactment, execution and control of the budget, regardless of whether these rules are comprised in the organic budget law.

For budget institutions to be effective, it is important that they are broadly accepted by the political community of the country concerned. For this reason some countries have special rules for the enactment of the organic budget law that require approval by a qualified majority in Parliament. If the organic budget law can easily be changed by each new government, politicians may be inclined to consider the law as just another tool to facilitate their budgetary policies. The budget procedure thus becomes politicised and cannot effectively fulfil its role as a constraint on the behaviour of the incumbent government. Therefore it is important that the organic budget law and other budget institutions command broad political approval, even if there is no formal qualified majority requirement. Since in the long run this is in the interest of all major political parties (every incumbent party may be ousted in a few years), the government may also informally adopt procedures that guarantee such broad support. For instance, the government can encourage such a sphere of consensus by committing the preparation of institutional change to working parties in which financial experts of the opposition are represented.
GOVERNMENT FAILURE

The common pool problem and universalism have been identified by political economists as major causes of government failure in representative democracies. In order to illustrate these problems it is necessary to make a specific assumption about the motivation of politicians. In this paper it will be assumed that politicians maximize the utility flowing from the provision of public services to themselves and groups in the electorate with similar preferences. Politicians are seen in other words as representatives of certain subgroups of the electorate with similar preferences for public services and they are trying to serve the interests of these subgroups as well as they can.

This assumption seems rather different from the more conventional notion in political economy that politicians maximise votes in elections (Downs 1957). Indeed in the latter view, as Downs put it, “Parties formulate policy in order to win elections, rather than win elections in order to formulate policies.” It has been noted that the difference might be less important than it seems at first sight because in an electoral system of first past the post or in a system of proportional representation with no more than two parties, and assuming complete information on the part of the electorate about the policy positions of the candidates and no abstentions from alienation, politicians are compelled to choose vote maximizing policies on penalty of certain electoral defeat (Wittman 1983). However, in reality the electorate is not completely informed about policy positions and many citizens do abstain from alienation. In these cases politicians may be able to seek preferred policies without too much electoral consequences. Furthermore, there are many systems of proportional representations with more than two parties, including Hungary. In this case they can trade off policy preferences against voter support. Finally, the total convergence of candidate policy positions implied by the assumption of vote maximization, seems for most political systems rather implausible. So it does for Hungary. In this light the present exposition will be based on the assumption that politicians seek the implementation of preferred policies.

The common pool problem refers to the phenomenon that services financed from common resources tend be provided in too large quantities, due to the fact that the benefits from the services are more concentrated than the costs of the common resources. In the case of the government budget the common pool problem implies that a parliamentary majority may decide to fund a publicly provided service in larger than optimal quantity if that service benefits that majority. In that situation the minority pays a part of the tax price but does not benefit from the service. The problem is caused by the fact that in general the benefits from publicly provided services are distributed more unevenly than the costs of the taxes that are used to finance the services. Benefits are more concentrated than costs.

The common pool problem is exacerbated in the absence of a binding fiscal rule. In that case the common pool not only exists of current revenue but also of the proceeds of loans which have to be redeemed by future revenues. The common pool problem thus gives rise to a problem of time inconsistency: debt funding of additional expenditures does not originate in time preference of current benefits over future benefits, but in the fact that current benefits are more concentrated than future revenues (Drazen 2000). Therefore future revenues may be used for current expenditures (‘added to the common pool’) via the increase of public debt, in spite of the fact that no politician favours such action on the basis of time preference alone.

The common pool problem does not explain how it is possible that services may be provid-
ed in higher than optimal quantities if they benefit only a minority of the politicians. However this phenomenon occurs as well and it can be explained by universalism.

Universalism is the phenomenon that minorities support each other’s proposals for output expansion of services that benefit them (Tullock 1981). In the US, where this process is mainly taking place in the Congressional budget process and well observable in view of the public character of the proceedings, universalism is mainly studied as a negotiation process. This process is known as ‘logrolling’ and consists in the exchange of votes in support of funding proposals for separate services. In this process politicians attempt to bid down the outputs of services that do not benefit them and to bid up the outputs of services that benefit them. Under certain conditions, an equilibrium can be reached in which all services are provided in too large quantities, even if each of them benefits only a minority.

It has been noted that the phenomenon of logrolling is essentially equivalent to the practice that occurs in European cabinet meetings when ministers acquiesce in each other’s funding proposals, in which they have no political interest (Kraan 1996). This phenomenon is known as the “non-intervention principle”. Since it implies that ministers do not oppose each other’s proposals for increased funding of services that benefit minorities, it results in the approval of all such proposals.

Universalism usually coincides with the common pool problem. Minority services are not only provided (due to universalism), but also provided in too large quantities (due to the common pool problem). It is in particular this combination of government failures which causes the gravest kinds of distortionary allocation. This is the case because services benefiting minorities generally have more distortionary tax prices (in the sense of higher deviation from unit costs) than services benefiting majorities, because they are more heavily subsidized by the non-benefiting part of the citizenry.

The appendix provides an illustration of both kinds of government failure on the basis of some very simple models of political decision-making.

**TOP DOWN BUDGETING**

Political economists have generally found that institutions in the public sector may lead to deviations from optimal allocation in the same way as institutions in the private sector. In both cases improvements are usually possible by institutional reform, without assuming that individual consumers or producers will put aside their individual interests. What makes the public sector fundamentally different from the private sector, is that in the former there is no equivalent to the free market under conditions of full competition and complete information. In the public sector there is no such “ideal” set of institutions. Indeed there is a substantial amount of literature in political economy showing that such institutions can-not exist in the realm of collective decision-making, regardless the motivation of agents such as politicians and bureaucrats. This means that government failure is a more fundamental and less tractable problem than market failure. The latter can often be addressed by moving closer to the ideal, for instance by removing obstacles to competition or improving information. Similar remedies are not available in public sector reform. Government failure cannot be fundamentally eradicated. However, this does not mean that there is no scope for institutional reform. Especially in the area of budgetary decision-making, OECD countries have made considerable progress in the last decades with reforms that have lead to generally beneficial results. On the basis of practical experiences, but also stimulated by theoretical insights, more atten-
tion has particularly been given to reforms aimed at mitigating government failure caused by the common pool problem and universalism. In particular it turns out that reforms aimed at so-called top-down-budgeting can eliminate certain excesses that are caused by the combination of both kinds of failure.

Top-down budgeting can be defined as budgeting according to a time table which guarantees that definitive decisions about the totals of both revenues and expenditures are taken before decisions are taken at the line item level.

Important aspects of top-down budgeting are:

1. all major proposals for changes in revenue legislation have to be considered simultaneously with all major proposals for expenditure increases or cuts. This implies that all trade-offs can be made: between different revenue sources, between different expenditures and between revenue sources and expenditures.

2. top-down budgeting is compatible with all kinds of fiscal rules: those that set constraints on the total deficit, those that set constraints on the current or operational balance (golden rules) and those that set constraints on expenditures.

3. once the decisions about the totals are made, they should be maintained rigorously, not only during the rest of the budget preparation process, but also during budget execution.

The consequence of top-down budgeting is that excessive (Pareto-inferior) expenditures will be cut in broad packages or across the board in order to finance tax relief. This will be supported by all major political groups in parliament, if in previous periods the common pool problem and universalism have led to gravely distortionary allocation in favour of minority groups. Top-down budgeting will generally not cure the overspending on services that benefit a governing majority (as opposed to overlapping coalition of minorities). However, any kind of fiscal rule (overall, current or operational balance rules or midterm expenditure ceilings) may at least alleviate the common pool problem, by excluding excessive deficit financing. This will eliminate the time inconsistency that otherwise aggravates the common pool problem.

Effective top-down budgeting requires two types of institutional rules. The first concerns the budget time table. Top-down budgeting implies that in an early stage of the budget process, say at least half a year before the start of the budget year, a definitive decision is taken on the totals of revenues and expenditures and the resulting deficit. This requires that at that time a first reliable set of estimates is available on the tax revenues and expenditures on the basis of current policy. The macro-economic and demographic assumptions underlying these estimates should be published and be made by an independent public forecasting institute. Top-down budgeting does not imply, as is sometimes thought, that decisions on the totals are made before agencies and line ministries have had an opportunity to submit proposals for new initiatives. Indeed it is important that before the decisions on the totals are taken, such proposals are solicited, because otherwise the decisions on the totals will lack credibility by the agencies and line ministries.

The second type of institutional rules is rules of budgetary discipline. These have to assure that the decisions on the totals are rigorously enforced after they have been made. This applies to the rest of the budget preparation process as well as to the execution of the budget. In order to make this possible the decisions on the totals have to distribute the totals among the ministerial portfolios, both at the expenditure and the revenue side. Rules of budgetary discipline at the expenditure side have to guarantee that ministers submit their final budgets at the line item level in accordance with the totals distributed to them. New developments can be taken into account but only through reallocation among portfolios. It
is important that at the expenditure side the general rule should be that after the decision on the totals all changes should be compensated regardless whether they originate in policy change or in estimate updates on existing policies. However, a government may decide that estimate updates on certain entitlement laws in the sphere of social security may remain outside the compensation requirement to stimulate the automatic stabilization effects of the budget\textsuperscript{12}. Budget discipline at the revenue side requires that all legislated policy changes are compensated. Estimate updates at the revenue side have to be left out of the compensation requirement for reasons of both macro-economic stabilization and tranquillity in the budget process (these estimates tend to change per month).

Rules of budgetary discipline can only function if the budget is transparent. In particular it is necessary that a clear and objective distinction is made between estimates of the budgetary consequences of current policies and those of proposed policies. Transparency in this sense requires permanent updating of information about the estimated outcomes of the current budget year and on the estimates for future years on the basis of both current policy and proposed policy change. Moreover the macro-economic assumptions of revenue and expenditure estimates should be updated at least twice a year\textsuperscript{13} and be published in a way that allows public scrutiny. Only on the basis of these forms of transparency can budgetary discipline be effectively enforced.

Rules of budgetary discipline can only function smoothly if the estimates cover not only the budget year but also two or three out-years after the budget year. These multi-annual estimates should have the same binding force as the estimates for the budget year and be subject to the same compensation requirements. In general government policies have become so complicated that changes can only effectively be implemented over a multi-year period. Ministries can only be made responsible for compensation if there is enough time to change policies and organisational structures, including the required legislation. Rules of budgetary discipline have to apply to the budget execution phase as well. Some countries, including Hungary, have quite rigid rules on deviations from the budget, once it has been improved by Parliament. However, the deviations that are possible, sometimes after quite cumbersome procedures or even the enactment of supplementary appropriations laws, do not always require compensation. This is not effective from the point of view of top-down budgeting. The budget should be flexible and allow rapid and easy adjustment to new circumstances. However, compensation should always be required and line ministers should be thoroughly indoctrinated from their first day in office that compensation is the iron law of budgeting that can only be broken under penalty of dismissal.

**PRIORITIES FOR INSTITUTIONAL REFORM IN HUNGARY**

In recent years several international institutions have made suggestions to the Hungarian government for adjustment of budget institutions\textsuperscript{14}. Since the elections of 2006, the government has unmistakingly addressed some of the most urgent problems in budget control, but until now it is not entirely clear whether the institutional side of the problem is getting sufficient attention. This paper has argued that it is important to distinguish between budget policy and institutional reform. Cutting expenditures and controlling the deficit is certainly important, but even more important is institutional reform which will ensure that expenditures and the deficit are kept under control in the longer term.
For institutional reform to get hold, it is important that rules are implemented on the basis of broad political agreement and that they are supported by the opposition of the day. For this to happen it is necessary that institutional reforms are prepared by experts who command authority and are trusted across a broad political spectrum. In the Hungarian context with a strong and independent Central Bank and a similarly strong and independent State Audit Office, it may for instance be important to have representatives of these offices in a committee that makes proposals for institutional reform, possibly next to representatives of the Ministry of Finance, the Prime Minister's Office and academics of various political orientations.

Hungary has in recent years been struggling to get the budget of its central government under control. However, there is nothing special Hungarian about the causes of overspending and revenue shortage that have plagued the Hungarian budget process. Indeed, many OECD countries have gone in the recent past through similar periods of slipping control. It has been argued in this paper that from the perspective of political economy some of the problems can be identified as the common pool problem and universalism that are omnipresent in budgeting processes in western countries. What is necessary for Hungary is to strengthen its budget institutions so that some avoidable consequences of these kinds of government failure will be mitigated. The experiences of other OECD governments may be helpful in this respect.

An institutional reform that is most urgent from this perspective is the establishment of a firm procedure of top-down budgeting. Such a procedure is compatible with different kinds of fiscal rules, for instance total deficit rules, golden rules or expenditures ceilings. For the implementation of this reform it is necessary to strengthen the budgetary time table and to make sure that final decisions on the totals of expenditures and revenues, as well as on the deficit, are taken in an early phase of budget preparation. At the same early occasion the totals have to be distributed over the ministerial portfolios, both at the expenditure and at the revenue side. In Hungary, funds for new initiatives have typically still been allocated in a very late stage of the budget preparation process15. The consequence is that current policies are left untouched because ministers have no incentive to reallocate in order to make room for new initiatives as long as they have hope to have their new initiatives funded from new money.

To establish an effective practice of top-down budgeting it is also necessary to promulgate a set of clear and simple rules of budgetary discipline. These rules should require compensation for every instance of overspending, regardless of whether originating in updated estimates of current policy or in policy change. Only overspending caused by estimate updating in the sphere of social security legislation may be exempted from the compensation requirement. Similarly, revenue shortfalls originating in legislative change (not in estimate updating) should be subject to compensation.

A requisite for the effective implementation of rules of budgetary discipline is budget transparency. In particular it is necessary that a clear and objective distinction is made between estimates of the budgetary consequences of current policies and those of proposed policies. In addition it is necessary that the macro-economic assumptions of revenue and expenditure estimates be updated at least twice a year16 and be published in a way that allows public scrutiny. These conditions have not yet been fully satisfied in the Hungarian budget process.

Finally, for rules of budgetary discipline to function smoothly it is necessary that the budget contains multi-annual estimates with exactly the same binding force as the estimates for the budget year. In particular the multi-annual estimates should be subject to perma-
nent updating on the same footing as the estimates for the budget year. Similarly, they should be subject to the same compensation requirements in case of overspending or legislated revenue reliefs.

Rules of budgetary discipline should be widely dispersed and made available throughout the government. Of course at the end of the day, the effectiveness of these rules is dependent on the willingness of ministers to comply. A special responsibility in this respect lies with the Minister of Finance and the Prime Minister. However, their tasks will become easier if the rules command wide support and are seen by the whole of the political community as an impartial instrument to improve allocation in the public sector and to make the use of public resources more efficient.

The common pool problem can be demonstrated by use of a simple model which describes the preferences of a single politician for a single publicly provided good (*model 1*). The model assumes a strict zero balance fiscal rule and does not treat the time inconsistency problem that arises if debt financing is allowed.

**Model 1**

1. \[ u_\theta = \frac{u}{\theta} (x_1, m_\theta) \]
2. \[ g_\theta = p_\theta x_1 + m_\theta \]
3. \[ p_\theta = \frac{(b/k) \tau_\theta}{c_1} \]

The first expression is the utility function of the politician, who is called \( \theta \) (*Theta*). It is determined by the output of a publicly provided good: \( x_1 \), and net income of the politician: \( m_\theta \). Output is measured as the number of units available to each beneficiary of the good. The utility function is of the usual shape, inducing convex indifference curves.

The second expression is the budget constraint, with gross income of the politician: \( g_\theta \), tax price of the publicly provided good to the politician: \( p_\theta \), and net income of the politician (after tax): \( m_\theta \). The third expression is the definition of the tax price of the politician. The tax price is the tax share of the politician: \( \tau_\theta \), times the unit cost of the publicly provided good 1: \( c_1 \), times the number of beneficiaries of the publicly provided good 1: \( b \), divided by the capacity of good 1: \( k \). Recall that the politician is supposed to be representative for a group in the electorate with similar preference and similar incomes.

In the case of a pure public good \( (k = h) \) the tax-price of the service to the politician amounts to: \( \tau_\theta c_1 \). In this case only one unit of the good has to be funded per beneficiary unit. In the case of a pure private good \( (k = 1) \), the tax price to the politician amounts to: \( b \tau_\theta c_1 \). In his case \( h \) units of the good have to be funded per beneficiary unit. This tax-price equals the unit price \( c_1 \) if the number of beneficiaries is equal to the reciprocal of the tax share: \( b = 1/\tau_\theta \). This is for instance the case if the good is provided to all citizens and if the politician pays the average tax price. If, on the other hand, the private good is only provided to the politician \( (b = 1 = k) \), the tax price is \( \tau_\theta c_1 \), which in the case of a private good is almost zero and the good is effectively free. In practice many publicly provided services are somewhere in between purely public and purely private \( (1 < k < b) \). Moreover, in a single budget year not all citizens are beneficiaries, for instance: education, social security. This implies that the number of units that the government has to fund per beneficiary unit is typically smaller than the reciprocal of the individual tax-share so that the tax-price to the politician is smaller than the unit price: \( b/k < 1/\tau \) so that \( b/k \tau_\theta c_1 < c_1 \). This implies that for a politician and the citizens that he/she represents it is more beneficial to have...
the service provided by the government than to buy it in the market. In the former situation non-beneficiaries contribute to the funding via their tax-shares, whereas in the latter case the beneficiaries have to pay the full unit costs. This, in turn implies that the politician will be in favour of an output of the service that is higher than optimal.

The situation can be illustrated graphically by a conventional indifference diagram (see Figure 1). The horizontal axis measures the output of the publicly provided good available to the politician, the vertical axis measures net private income after tax. The figure shows both the budget constraint based on unit price $c_1$ and the budget constraint based on the lower tax price $p_1T$. The former leads the politician to favour output $s_1$, the latter to favour output $q_1$.

Universalism can be described by a small extension of model 1 that adds some additional goods and politicians to the decision-making process (model 2).

**Model 2**

1. $u_\xi = u_\xi (x_1, x_2, x_3, m_\psi) \quad \xi = 1, 2, 3, \ldots, \nu$

2. $g_\xi = p_{\xi 1} x_1 + p_{\xi 2} x_2 + p_{\xi 3} x_3 + m_\xi \quad \xi = 1, 2, 3, \ldots, \nu$

Expression (1) describes again the utility function of the politicians. In this case there are three goods and $\nu$ politicians. Expression (2) describes the budget constraint of each of them. For convenience the tax-prices for each politician are in this model taken as given.

Suppose now that goods 1, 2 and 3 are services that benefit only a minority of the citizens, for instance education, social security and farm subsidies. Politicians who are in favour of a certain new educational service can now conclude a coalition with politicians who are in favour of an increment in social security service provision, so that both services are provided. In itself this does not need to constitute a major government failure because it is in the interest of both politicians to make concessions on the level of additional funding. This is illustrated in Figure 2 which shows the attribute space for services 1 and 2.

The ideal points of politicians 1 and 2 are indicated by $(q_1, 0)$ and $(0, q_2)$. Remember that $q_1$ is probably not the optimal output for education (good 1) because the tax-price of education for politician 1 is too low. The optimal output for education may for instance be $s_1$. Similarly, $q_2$ is probably not the optimal output for social security (good 2) because the tax-price of social security for politician 2 is proba-
However, starting from the initial situation $O = (0,0)$, the coalition of politicians 1 and 2 will probably agree at some compromise at the interval AB of the contract curve between $(q_1,0)$ and $(0,q_2)$. This interval constitutes an improvement for both politicians vis-a-vis the status quo O. However, each point of this interval represents a combination of lower outputs than $q_1$ and $q_2$, because both politicians have to make concessions. Indeed the set of output combinations represented by the contract curve does not need to be too far away from the optimal output combination $(s_1, s_2)$.

However, vote trading in a majority coalition is not yet universalism. The latter phenomenon occurs only if more than a single majority coalition engages in vote trading. In model 2 this would occur if, for instance, politician 1 would enter into a coalition with politician 2 as well as with politician 3. Unfortunately the resulting situation cannot readily be illustrated graphically because this would require a graph in three dimensions, but some visual support may be provided by a providing a two-dimensional graph in perspective (Figure 3).
In this figure \((q_1,0,0)\), \((0,q_2,0)\) and \((0,0,q_3)\) represent the ideal point of the politicians.

If politicians 1 and 2 again enter into a vote trading deal an output combination such as \((s_1,r_2,0)\) on the contract curve between \((q_1,0,0)\) and \((0,q_2,0)\) can be reached. A subsequent deal between politicians 1 and 3 may then lead to an output combination such as \((s_1,s_2,s_3)\). It is characteristic for this result that it is not anymore in the Pareto-optimal triangle between the three ideal points. This is indeed the defining characteristic of universalism: it leads to non-Pareto-optimal outcomes and can even lead to the adoption of proposal \((q_1, q_2, q_3)\), in which all goods are provided in too large, non-optimal quantities. Outcomes which deviate from the Pareto-optimal surface can be avoided if all trade-offs between different expenditures, different revenues and expenditures and revenues are considered at the same time.

\[\text{Notes}\]

1 IMF (2005)

2 European Commission (2006). This number excludes the consequences of pension reform, the purchase of military Gripen aircraft and quasi-fiscal activities of public enterprises.

3 In this paper I use the term political economy for the area of scientific analysis that is also known as public choice theory. It comprises an empirical branch which is concerned with political and bureaucratic behaviour and a normative branch which is concerned with institutional design.

4 The Act on Public Finance, which is the organic budget law of Hungary, can be changed by simple majority. Strengthening of the majority requirement would necessitate a constitutional change.

5 For instance by de facto requiring broad consensus in the parliamentary committee reporting on changes of the organic budget law and other budget institutions. Such practices exist in many OECD countries.

6 See for instance Poterba – von Hagen (1999)

7 Downs (1957), p. 28

8 Apart from the common pool problem, time inconsistency in public budgeting may also arise from the political business cycle. According to the Nordhaus model pre-electoral spending may lead to favourable election results for in incumbent government if voting is retrospective, electors are motivated by unemployment and inflation and experiences are discounted with time past (Nordhaus 1975). The empirical evidence for the Nordhaus model is mixed. However the evidence for a related model for an business cycle in fiscal policy is strong (Alesina – Cohen – Rubini 1992). Moreover the latter model suffers less from the conceptual problem that it assumes irrational voters (Drazen 2000).

9 Much of this literature builds forth on the so called impossibility theorem, proved by Arrow (1952).


11 The operational deficit takes account of depreciation of public capital goods, the current deficit does not.

12 For instance in the UK the AMA sector (annually managed appropriations) mainly consisting of social security and health entitlements remains outside the compensation requirements. However, in Sweden and the Netherlands all changes in estimates on entitlement laws have to be compensated, if necessary by change of the laws.

13 Once to inform the decision about the totals and once to update the budget before submission to Parliament.


15 For instance in the “programme planning” procedure initiated during budget preparation 2005 and in the “central basket” procedure used during budget preparation 2006.

16 Once to inform the decision about the totals and once to update the budget before submission to Parliament.
Indifference curves are convex if the utility function is monotonically increasing in $x_1$ and $m_T$ and quasi-concave.

The tax share of the politician is the share of total tax revenues contributed by the politician. For instance, if there are 10 million citizens, and the politician has an average tax share, $\tau_0 = 1/10,000,000$.

**LITERATURE**


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THE KEY ISSUE FOR SUCCESSFULLY REFORMING THE PUBLIC SECTOR IS MODERN REGULATION OF PUBLIC FINANCES

The competitiveness of the Hungarian economy considerably depends on the capacity of public institutions and the quality of their operation. The fundamental purpose of public finance reforms is to establish conditions whereby the decision-makers pass responsible decisions on public funds, the rights and obligations of users are unambiguous, and the costs, profits and results of operating and transforming the public sector are clear. A necessary but insufficient condition of institutional reforms – by which we mean the reorganisation of the system of operating rules and organisation – is the modernisation of the conditions of the public sector’s economic management. The required solutions

• restore public confidence, facilitating – actual or tacit – social agreements among the fundamental interest groups and various generations;
• ensure the predictability of fundamental institutions (tax system, pension system, social benefits, etc.), social solidarity and equitable sharing of public dues;
• enforce responsible exercising of the budgeting right of the legislature and the local bodies of representation;
• harmonise the tasks and the allocated resources concerning both the governmental levels and the areas of public policies, and
• require the managers and users of public funds to pursue responsible and transparent economic management.

Reasonably, institutional reforms should be represented in the legislation first. Clear legal regulation is the basis of any change in terms of quality. Predictable and enforceable rules of public finances are also considerably weighted in terms of regaining international confidence. The development and passage of laws reflecting the best international practice would demonstrate the existence of consensus in the key issues of public funds regulation within the country, and of sufficient determination to implement the necessary reforms.

The new provisions of law related to public funds should ensure that the legal security for the operation of the public sector is not more risked by political conflicts than to a minimum extent. This is the key issue of authenticity in the current Hungarian economic policy.

REGULATION OF PUBLIC FINANCES REQUIRES MAJOR MODERNISATION

There is a need for comprehensive modernisation of the laws mainly passed in the early 1990s, determining the operation of the public sector, including the planning, collection and utilisation of public funds. The legislature and the legislation preparatory staff attempted to adapt to the changing requirements by continuously amending these laws and the related implementation decrees. Due to the innumerable amendments – each justified in itself –, the regulation of the economic management of public funds is complicated even to the law appliers. In many cases, it is not clear which issues to regulate in law and which in decrees.
Today, unjustified deviations exist in both directions. Regulation by law calls for extension both in terms of contents and depth compared to the currently effective laws, i.e. multiple regulatory subjects can be and should be transferred from today’s decrees to new regulation by law with more current contents. At the same time, we often find provisions of procedural nature stipulated in laws, which could be regulated in decrees as well. A review of regulation with a view to deregulation would also be relevant.

The approach and terminology of the current regulation of public finances is obsolete, and is outdated by development, primarily as a result of our accession to the European Union. International literature, and practice in the wake of it, brought considerable changes in the regulation of public finances in the second half of the 1990s. International organisations adopted a number of financial, “good governance”, auditing, accounting and statistical principles that would be essentially justified to be incorporated in the domestic regulation of public finances, similarly to the leading foreign methods of budgeting and public finance management. Continued use of the proven elements of the domestic regulation is certainly expedient.

Transparency should be added to the structure of public finance regulation. It would be necessary to stipulate the principles of public funds management in law (possibly the Constitution), with an effect applicable to all laws on public finances, laying the foundations of the rules for such laws. Relying on this, the regulation of public finances – according to a systematic approach – is expediently divided into blocks. (It is not necessary, however, to regulate each block in a separate law; what is more, separation of the various topics would break the uniform logic of regulation.) The recommended blocks of regulation are:

• budgeting and final accounts;
• information management and financial management (commitments, preliminary audits, allocation, payments, cash management, management of obligations and claims, accounting);
• definition of the organisational forms of organisations operated under state budget control, their legal status and rules of economic management (the so-called status issues);
• regulation of balance-related issues of the budget, the system of budgetary responsibility, and
• economic management of public assets.

**Thesis No. III**

**Regulation of public finances should be based on internationally accepted principles confirmed by domestic political consensus**

In developed and democratic states and in international organisations, the principles and best practices that should be represented in the modern regulation of the public sector have crystallised. International recommendations can only be actually beneficial if the adoption is confirmed by domestic professional, political and social consensus.

On developing the new regulation, the majority of indispensable principles can be identified using our current knowledge. On regulation, the principles of representation of the people and limited authorisation should be materially applied. We consider it a fundamental principle to ensure broad transparency, directly supported by full compliance with the principles of publicity and controllability. (For example, in addition to current expenditures, the resulting financial commitments and determinations should also be disclosed.) The principles of performance orientation, foresight and sustainable balance should be
enforced in budgeting and economic management. The representation of all these principles can be ensured by actual application of the principles of completeness and specification. These principles need to be complemented by consistent representation of the principle of authenticity.

**THESIS NO. IV**

**THE CORNERSTONE OF REGULATING PUBLIC FINANCES IS ACCURATE SPECIFICATION OF PUBLIC DUTIES**

Public financing becomes uncontrolled and intransparent if the state does not pass a clear-cut decision on specifically which assets and services it wishes to provide itself. Unambiguous assignment of each task to a governmental level is also crucial. Declaring a task to be a public duty (state or local governmental duty) is a legal act. Full listing of all state functions and duties cannot be resolved under a single law, and this cannot even be a task of public finance regulation. At the same time, the procedure of defining tasks requires prudent legal regulation. As a consequence of the currently valid constitutional rules, state duties include establishing the internal/external security of the country, ensuring democratic operation of the state organisation, maintaining the institutional guarantees for enforcing fundamental rights. These frameworks also provide the bases of the new regulation. The new law (or the Constitution) should necessarily stipulate:

- that public duties may only be allocated by law, concurrently designating the necessary resources and the responsibilities for each task;
- that the minimum scope of public duties should be defined to avoid the prevention of rights stipulated and institutions listed in the Constitution, and
- that the services provided by the state should be available to those affected (entitled), providing equal opportunities.

Catering for public duties obviously incurs public expenses, and raising and distributing the funds necessary for financing public expenses is a privilege and an obligation under public law derived from the Constitution and other provisions of law. Public duties, however, can also be provided by natural persons and/or private enterprises, under contracts and assignments.

**THESIS NO. V**

**THE NEW REGULATION OF PUBLIC FINANCES SHOULD DISTINGUISH TWO LEVELS WITHIN THE STATE BUDGET**

It seems expedient for the new public finance regulation to define central and local levels instead of the two levels and four subsystems defined by the current regulation of public finances. The central level includes the current central budget, the Pension and Health Insurance Fund and the dedicated state funds. The independence of each of the latter funds needs revision. Special rules may remain applicable to social security and dedicated state funds in the future, too. This, however, does not justify handling these as a separate subsystem.

The second level comprises budgets for local governments (minority self-governments). The financial relations of the two levels need regulation, with special regard to the harmony, predictability and transparency of tasks and resources.

The accepted principles of public funds should be enforced at both levels of public finances, however, the particularities of the two levels should be considered to the utmost on regulation and selecting the methods.
THESIS NO. VI
REGULATION OF PUBLIC FINANCES IS NECESSARY, WHICH EMBRACES THE ENTIRE STAFF AND PROCEDURE OF PUBLIC FUND MANAGEMENT

The theoretical (transparency, controllability, etc.) and general rules of the new legal regulation should be extended to all entities managing public funds, irrespective of the organisational form and ownership relations. A narrower scope of rules will be valid only for the actors of the public sector (organisations under state budget control and organisations outside state budget control but directly related to the state in terms of foundation and financing). The effect of certain special rules of law will be exclusively applicable to organisations related to public finances and under state budget control.

A fundamental issue in regulation is clear and accurate terminology (public sector, public finances, public funds, etc.). On defining and construing terms, the solutions evolved and accepted in the international practice are applicable. The public finance regulation should specify the notions of governmental sector and public sector. The reason is, on the one hand, that these are indispensable for supplying sufficiently accurate data related to the convergence programme. On the other hand, the way non-governmental organisations of the public sector participate in budgeting, data supply and reporting needs to be defined.

The new regulation should use the broadest notion of public funds as a starting point, regarding all revenues under public law, contributions to public services, the portion of state assets represented by funds and all revenues from the utilisation of assets as public funds.

The regulation that adopts a new approach should embrace all movements of public funds management observing identical principles, i.e. the principles accepted here should be promoted not only on passing new legislation but also on amending older legislation that cannot be abolished for the time being.

THESIS NO. VII

The currently valid regulation grants unjustifiably great liberty for the current governments (chapters, institutions) to regroup various appropriations accepted in the budget act, while overloading legislature with a large quantity of unmanageable information.

The purpose of the new regulation is to establish securities in the system of budgeting (the presentation and the acceptance procedure), reporting and settlements that guarantee for the substantial decisions related to the distribution of public funds to be actually passed by the National Assembly and the representative body of local governments. For this reason, the actual decision-making options offered by the current political decision (budget) need to be clarified. The formal political acceptance of previously decided and basically automatic expenses from year to year may just as well deprive political responsibility of its substance as the intransparency of decision preparatory materials. It is important for MPs/representatives to pass decisions only in substantiated situations of decision-making. It requires voting units, i.e. the tasks and appropriations MPs/representatives actually need to pass decisions on, to be adequately defined in budgetary documents. Politics should decide on aggregates that adequately promote political preferences and accountability in terms of implementation, but do not disturb the operability of implementation.
In terms of regulation, flexibility indispensable for reasonable implementation of the budget needs to be ensured, however, the practically unlimited possibility of regrouping appropriations without parliamentary controls should be eliminated. The environment for implementing budgets is rather variable, which requires the conditions for flexible responses. The current regulation of setting up a supplementary budget is easily avoidable, while the rules of procedure are rather complicated and time-consuming, for which reasons the obligation to prepare a supplementary budget does not comply with the intended role. Establishing new, more flexible conditions for budgeting under the National Assembly’s control would facilitate better implementation – besides promoting the principle provided in the thesis.

Another important means of providing parliamentary control over the executive power is the acceptance of the final accounts. The National Assembly can exercise its jurisdiction materially if the structure of the final accounts is bound to be identical with the structure of the accepted budget. It is worth considering assigning legal consequences to the non-acceptance of the final accounts – except in a period of government change.

Emphasizing the responsibility of executive power in general raises the issue of legal consequences. Intentional or negligent violation of rules related to public funds currently incurs sanctions under labour law and – in particular cases – criminal law. The proposed new public finance regulation that lays down the general principles of public funds management (transparency, completeness and specification) not only in general but also in specific provisions, may represent great progress in this field. With the existence of specific provisions, the responsibility under labour law or criminal law can be construed for those violating the rules of publicity, completeness or authenticity intentionally or through negligence.

In the current situation of public finances, the challenges of budgetary equilibrium and financial stability (sustainability) are placed in the foreground. Foreign experience shows that – in case of adequate political intentions – adoption of a rule-based budget and/or involvement of independent institutions may present a solution. The convergence programme or the criteria applicable to the Euro zone define the requirements of equilibrium applicable to the entire public sector. In order to comply with these, it is reasonable to stipulate the rules that ensure budgetary equilibrium and sustainability in law for each level of public finances. These rules are to be confirmed by procedural rules aimed at nipping overspending in the bud. Such a requirement may be, for instance, that a financial impact study is required to be submitted with any act affecting the budget, indicating the extra financing requirement of the act and the related resources. On budgeting, appropriate reserves need to be generated to handle risks endangering the equilibrium, and financial sanctions need to be applied if the expense appropriations are exceeded.

However, a public finance equilibrium, i.e. a sustainable budget, is a necessary but insufficient condition to the country’s actual objective, i.e. sustainable development. A budgetary equilibrium cannot be ensured through over-taxation or curtailments risking the provision of fundamental state duties, even in the medium term. The efforts made to reach a budgetary equilibrium may not jeopardise the competitiveness of the economy, the welfare of the population either on the revenue or on the expenditure side, but it is the sharing of public dues and public expenditures that are precisely aimed at reinforcing these. This requirement
Again confirms a necessity for a comprehensive public finance regulation by emphasizing that commitments made for public expenditures and waiving public revenues should be assumed considering the principles described above.

**THESIS NO. IX**
**THE REGULATION SHOULD ENSURE TRANSPARENCY OF COLLECTING AND ALLOCATING PUBLIC FUNDS, IRRESPECTIVE OF THE ECONOMIC ACTOR PERFORMING THESE**

Transparency is an important value of public finance systems. When implemented, it contributes to restoring public confidence, reducing losses derived from various irregularities, and may improve financial discipline. Transparency may significantly reduce the costs of handling public debt. In providing state duties, an increasing role is assigned to organisations in the non-governmental sector. For public-private partnership to be fruitful for the public, all users of public funds need to be accountable. Transparency is ensured by an adequately organised information system, and the publicity of processes and decisions. Information should be available to an appropriate depth and with contents specified in international standards – i.e. also in compliance with administrative, economic and functional classifications.

As a result of transparency, risks intrinsic to the whole and various parts of public finance should become known. An important condition of revealing these is for the state accounting to demonstrate the change in the financial standing of the sector, the off-balance sheet risks and the risks related to tasks provided outside the public finance. (These include various state receivables, conditional and contingent liabilities and receivables from and liabilities to business organisations owned by the state/local governments.)

Another important requirement is transparency of the financial legal system. The regulation of public finance should contain securities for the stability of legal provisions affecting both the revenue and the expenditure sides, and, if any changes are necessary, the transparency of those.

Publicity, at the same time, is also security for political competition to be materially promoted on elections. This would also be the purpose of a statutory report issued – with predefined contents – prior to elections, which would explain compliance with the government programme and, in connection with that, the situation of the budget, with special respect to any future risks thereof.

Disclosing the details of public assets management may not be limited by the protection of business secrets. At the same time, it needs careful deliberation what should and what can be disclosed of public finances, in order to avoid premature disclosure of data (on public procurements or debt financing, for instance) weakening the business position of the state.

**THESIS NO. X**
**THE PRINCIPLE OF “VALUE FOR MONEY” SHOULD BE ENSURED ON BUDGETING AND ALLOCATING PUBLIC FUNDS**

The principle of performance orientation can be promoted in public finance regulation by enforcing the principle of “value for money” for financial management – from budgeting to providing specific services. This means that each forint of the budget should be used effectively and efficiently.

In the current practice of budgeting, performance orientation is not promoted: instead of the actual resource requirements of each task, budgeting takes the evolved situation as a starting point, and the central allocation of
resources is not based on performance requirements. This is what programme-based budgeting would change.

A significant and increasing part of expenses should be planned based on the relevant programmes. The system of programmes consists of major programmes, programmes and subprogrammes. According to international experience, the central budget of a country contains 30–40 major programmes in general. The programmes within each major programme would be the voting units for decisions on the budget. The programmes may be permanent or temporary ones. Typical cases of temporary programmes are capital expenditures, but these could also be programmes of transition to a programme-based budget. The voting and the decision-making procedures are different in case of the two programme types. It is recommended that a programme-based budget is adopted for EU funding programmes and mostly ministries with “chapter managed appropriations”, as a first step.

The remaining balance of budgetary expenses are to be planned in an institution-centred way, starting from the resource requirements of maintaining apparently necessary capacities, which are not necessarily identical to baseline budgeting.

An opportune field for using programme-based budgeting is the system of local governments where experimental projects have been staged since the mid-1990s. At the same time, the introduction of new budgeting methods for local governments requires a differentiated approach and in certain cases longer time.

Subsequent to budgeting and in the course of economic management, performance orientation can be promoted by assigning performance indicators to the application of budgetary appropriation, and monitoring compliance with these at the levels of organisation, sector and government.
companies. Development of a state accounting system seems necessary, which is better adapted in terms of approach to the peculiarities of budgetary management, and provides a better service in response to the management information requirements of the government and local governments. By consistent promotion of international standards applicable to the governmental sector, such a regulation can be developed. In the course of this, particular attention needs to be paid to a complex reflection of financial risks in the public sector and of changes in the public assets. The current practice of disclosing the accounting issues regulated by law for the competitive sector only in government decrees for budgetary institutions cannot be maintained. This is justified to be regulated by law instead.

**THESIS NO. XII**

**AN IMPORTANT ESTABLISHMENT FOR COMPLIANT AND SUCCESSFUL FINANCIAL MANAGEMENT IS A SYSTEM OF INTERNAL CONTROL**

The internal control system for public finance includes the objectives, guidelines, operating procedures and rules set up by the management of the respective organisation. Without operating this control mechanism, it is not possible to make the organisation ensure economical, effective and efficient implementation of its mission and various efforts, operation in line with the relevant legislation and internal rules, protection of the organisation's assets and information, the appropriate quality of the accounting information system, reliable and timely annual financial reporting, avoidance and investigation of faults and frauds. An important function of the renewed regulation is to cater for this area, which is also neglected by the current regulation, in a way that reflects its significance and complies with the international standards. The notion and significance of internal control mechanisms need to be incorporated in the new regulation, and it should be declared that the elements and structure of internal control systems to be set up at the level of each institution – relatively independently – should comply with the international standards. The basic requirements related to the independent internal control function within the internal control system are justified to be laid down in law. Parallel to this, the current regulation by decree should be eliminated.

**THESIS NO. XIII**

**ADJUSTMENT OF THE PUBLIC FUNDS AUDIT SYSTEM TO THE NEW REQUIREMENTS IS INEVITABLE**

Auditing is a priority function of public funds management. On specifying the new regulation, the audit system needs significant improvement. The workload shared by organisations providing internal audit functions needs to be specified in a clear and unified structure (Hungarian State Treasury, organisations performing audits related to the EU funds, supervisory audits and organisations performing internal institutional audits). It is particularly important to promote the principles of effectiveness, efficiency and economy over the whole audit system. Concerning the changing functions, it needs to be indicated that an increasing emphasis is placed on compliance with the professional requirements of the plans and the performance evaluation of each area, in addition to traditional compliance auditing.

A changing role of external audits and a broadening scope of tasks represent an international tendency. The SAO's audit licences need no extension, but the changes of the whole public finance regulation may justify further specification of these. Audits performed by the State Audit Office increasingly focus on revealing the financial and operating risks in public
finances, and the advisory role performed for the legislature is growing.

Audit capability is necessary not only for financial but also for professional reasons. Enforcing various controls derived from the peculiarities of specialized duties is a task of specialised audits. The activities of these also need to be made more coordinated.

Modern democracies set up adequate audit facilities also for civil organisations. Instead of replacing them, these supplement the audit facilities of state organisations. In order to enforce a targeted spending of public funds, the controlling role of publicity is worth utilising.

**THESIS NO. XIV**
REGULATION OF PUBLIC FINANCES SHOULD BE PREDICTABLE AND RELATIVELY STABLE

On regulating public finances, the requirement of long-term predictability and social acceptance of the state's behaviour, as well as public confidence in new solutions are attached key significance for the participants of the economy. For this reason, the stability of regulation and the avoidance of frequent modifications are particularly important for legislation on public funds. Predictability includes careful preparation of laws (impact studies, social coordination, consideration of local government specialities), creating harmony among various blocks of the law, and specifying the effective dates of laws in a way that leaves sufficient time for preparing for the application thereof. The proposed regulation of public finance adopts a completely new approach, new methods and techniques compared to the domestic practice in the systems of budgeting, final accounts, state accounting, auditing and financial control. For this reason, providing as much as years between the acceptance and putting into force of new rules may be justified, or a phased enforcing of new provisions. An important requirement is that implementation decrees are known subsequent to announcing new legal rules but well before they come into force, including the requirement that sufficient time is also available for local governments to create their own implementation decrees.

Establishing – or maybe codifying – a practice whereby at least a year's preparation time is provided for completely new rules applicable to public finance (including the adoption of new tax types) between announcing and putting into force.

**THESIS NO. XV**
FOR PREDICTABILITY OF THE SYSTEM OF PUBLIC FINANCES AND DEVELOPMENT OF PUBLIC CONFIDENCE, THE FUNDAMENTAL RULES NEED TO BE INCORPORATED IN THE CONSTITUTION

If no majority is available on this in the National Assembly, the regulation of public finances by law may be implemented without changing the Constitution. The regulation, however, would be complete, and would best serve the financial security of citizens and increase the confidence of actors in the money market if constitutional guarantees were set up to enforce the major principles of public finance (e.g. authorisation of people's representation, transparency, completeness, specification, sustainability).

Such a guarantee would be, among others, to require a budget to be produced for each calendar year, and the implementation thereof to be accounted for under the final accounts within a period defined in the Constitution; equilibrium to be ensured between the expenditure and revenue sides of the budget to be prepared following the new approach; in addition, to budget for the required financial cover to provide each state duty.
The Constitution should indicate the function of final accounts: settlement by the government, and in case of acceptance, release from the obligation of implementing the budget. Bills on budgeting and final accounts may exclusively be tabled by the government, and these bills may not contain amendments to other laws.

The Constitution should define the notion and exact contents of sharing public dues – more accurately than currently, detailing each form of sharing public dues: the persons and their organisations are required to contribute to covering the expenses of common needs based on their participation in the economic traffic, their revenue and financial statuses, activities, in line with their ability to bear burdens, especially with taxes, duties, contributions, customs and the consumer contributions payable for public services used (collectively referred to as: public dues).

In addition, the supreme law should provide for a situation where the National Assembly has not created the budget act for the next year in due time. In such cases, the government should immediately submit a bill on transitional economic management to the National Assembly. Such a law loses effect on the day the new budget act comes into force, and on the date defined in the Constitution at the latest. Until the law on transitional economic management is created, or if that law has lost effect before the new budget act was put into force, the government is authorised to collect the revenues under the relevant legislation and to perform the proportionate expenditures within the expense appropriations of the previous year's central budget.
Pál Csapodi

The key messages of the theses on the regulation of public finances

The Republic of Hungary inherited serious external and internal public debts at the time of the regime change. In the early 1990s, financial instability was intensified by a drastic drop in the production and employment levels. The system of public duties built in full employment was not possible to be maintained. As a result of the reforms and constringent measures carried out, the country's financial standing was consolidated by the mid-90s, and kept improving until 2001. Subsequently, however, the financial balance was lost again. Public overspending, which was particularly seen in election years, only improved the conditions of economic growth temporarily. By the middle of the decade, unsettled public finance became a drag on economic competitiveness, and weakened the foundations of sustainable development. The operation of the local government system represents serious risks from the perspective of both financial equilibrium and the absorption of EU funds. All these necessitate comprehensive re-regulation of public finance.

GOALS FOR THE NEW REGULATION

Renewing the regulation of public finances serves a dual purpose. The direct goal is to establish rules and institutions and to find technical solutions that render public funds management more transparent, predictable and efficient at the level of the national economy, local governments and institutions. The ultimate goal is, however, to improve the internal and external conditions to competitiveness and sustainable development by means of a better system of public finances and financial balance with increased confidence in it.

THE ROLE OF THE STATE AUDIT OFFICE IN THE RENEWAL OF PUBLIC FINANCE REGULATION

Based on its experience gained through producing audits, opinions on budgetary bills and final accounts, the State Audit Office has tabled multiple proposals for a comprehensive modernisation of regulating public funds management. In order to catalyse the renewal of regulation, the SAO offered to lay the foundations of a new public finance regulation. The SAO was not lead by an intention of extending its audit licences in the process. On the contrary, our experience proved that subsequent auditing tools provide no remedy for public funds leaking for structural reasons or for overspending driven by political inten-
tions. Consequently, more regulation, trans-
parency and predictability need to be added to
the entire management of public funds.

During the groundwork headquartered in
the Research and Development Institute of
(RDI) of the SAO, a number of constituent
studies have been produced – with the involve-
ment of external experts –, international expe-
rience reviewed and professional debates held.
The most relevant documents will be subse-
quently published by the RDI in a dedicated
volume of studies. The study summarising the
research is accessible at the SAO’s home page at
www.asz.hu.

As an organisation reporting to the
National Assembly, the State Audit Office
attempted to word its proposals in a way that
facilitated direct utilisation in the legislative
work as much as possible. A compilation enti-
tled Theses on the regulation of public
finances (hereinafter referred to as the
Theses) published in this issue contains the
major principles, breakout points and meth-
ods of the proposed regulation, organised
under points. On wording the theses, we pri-
marily attempted to highlight issues impor-
tant for political decision-making, avoiding a
too deep and detailed description of profes-
sional implications.

THE OBJECT OF PUBLIC FINANCE
REGULATION

Very consciously, the Theses do not address a
renewal of the public finances act, only regu-
lation of public funds. A modern attitude to
the state and public sector requires the scope
of public finances regulation to be systemati-
cally extended to organisations managing
public funds outside the state budget. This is
how we are able to meet global challenges,
European requirements, but this is also what
our domestic experience suggests. In the past
few years, a global tendency whereby organi-
sations outside the public finances play an
increasing role in performing public duties has
also evolved in Hungary. Audits performed by
the SAO have revealed that the risk of public
funds leakage is the highest at the points
where the public and private sectors meet.
Only a new approach in the regulation can
eliminate this risk, where the application of
public funds is in the focus of regulation
instead of the organisation of public finances.
At the same time, the notion of public funds
should be construed extensively: all revenues
under public law (including waived taxes),
contributions to public services, the portion
of state assets represented by funds and all
revenues from the utilisation of public assets
should be deemed as public funds.

GRADUALITY IN RENEWING PUBLIC
FINANCE REGULATION

The renewal of public funds management is
probably not possible by passing a single law, or
incorporating a few easy-to-implement
thoughts of the Theses in the existing regula-
tion. Besides renewing the entire legal regula-
tion, the Theses offer proposals for a systemat-
ic re-regulation of certain blocks in the public
funds management. Certainly, it is not a duty
of the SAO to decide whether the legislator
should regulate certain blocks in a single law or
in various laws. An indispensable requirement
is to regulate the financial relations of the cen-
tral and the local levels in a more stable and
transparent way compared to the current state,
adjusted to the changes evolving through the
distribution of tasks. Ultimately, modernisa-
tion may be implemented without modifying
the Constitution, but the reform would be
complete if a chapter designating a constitu-
tional framework for public funds management
was added to the Constitution.
THE THREE KEY MESSAGES OF THE THESES

The most important message of the Theses is to lay the regulation of public funds management on solid foundations and enforce the principles through the entire regulation. The Theses lay down the key principles and outline the courses of regulation along the lines of which these may be enforced. We consider it important to reach a political and societal consensus on the principles.

The second emphatic consideration of the Theses is the importance to consolidate budgetary discipline. This is certainly not possible through casting a spell. Rules should be adopted to prevent exceeding budgetary limits in the first place. In addition, internal and external audits need more coordination.

The third message of the Theses to be highlighted is that modernisation has not left public funds management intact. Our accession to the European Union and to other international organisation justifies reflecting the standards developed by these organisations for the public sector also in the Hungarian regulation. The technologies of budgeting and financial management have developed. The development of information technology requires the key rules of the public funds information system to be formulated also at the level of legislation. The application of these should be given way or even cleared the way in the Hungarian public funds management.

In the continuation, I will explain these three messages in more detail.

THE THEORETICAL FOUNDATIONS OF PUBLIC FINANCE REGULATION

A few principles of public finance regulation are a consequence of the democratic nature of the state. On formulating other principles, the documents of multiple international organisations may be considered to be a part of the basis, as these organisations have in the past 10–15 years declared and compared a number of principles of “good governance” with the practice prevailing in certain countries.

The principle of representation of the people is derived from our democratic form of state, which states that the application of public funds should be decided by those that have received political authorisation to do so and are responsible for it in front of their voters. Enforcement of this principle presumes that the elected representatives are able to exercise these rights substantially, and at the same time, they are accountable on elections for exercising this right.

The currently effective regulation has granted unjustifiably great liberty to the executive levels – for over ten years – in terms of regrouping the various appropriations adopted in the budget act, while the proposed and accepted budget acts in their current forms are unsuitable for political bodies to reorganise fiscal processes through substantial decisions. In terms of settlement, the voting units are incorrectly designated, and, as a result, even decision-makers are frequently in no position to pass decisions. Off-budget risks directly or indirectly affecting public finances are represented unpredictably in the accounting. Without addressing this problem, the propagation of solutions relying on partnership with the private sector will add to the intransparency of public finances.

A key requirement to implementing the principle of representation of the people is that material changes to the appropriation may only be performed by an elected political body. This conflict may be managed, on the one hand, by way of application to real decisions, i.e. distinguishing appropriations according to the influence exerted on them by the current decision-making process. In the presentation of the
budget, it needs to be positively represented that the current decision-maker has a restricted opportunity to pass decisions not only in terms of time but also in terms of contents related to revenues and expenses. A key issue is to make the establishment of adequate voting units the basis of budgetary decisions. Politics should decide on aggregates that adequately promote political preferences.

The principle of limited authorisation comprises three elements. On the one hand, the government (the executive body of local government) is under an obligation of execution compliant with the accepted budget, which is a preliminary authorisation. On the other hand, the authorisation of the executive power has a definite term, which is typically one year. The third element is that earlier decisions and other determinations have a significant impact on revenues and expenses represented in the budgets for the relevant year. Economic management in public finance and the various processes, however, cannot be linked to the closure of budget years. Life goes on after the start/end date of each budget year. The promotion of this principle is able to ensure transition between the principle of representation of the people and reasonable operation, if budgeting and implementation are able to handle this conflict. The principle of limited authorisation may become a source of real conflicts, as the continuity of financial management requires commitments for multiple years, while adjustment claims derived from environmental and other factors require a possibility of making changes within a year. Incorporation of clear-cut rules applicable to this in the system of rules of approving and modifying the budget is not contrary to the principle of limited authorisation, if such rules are transparent and truly exceptional in nature.

A starting condition of promoting the principle of transparency is the clarity of the system of rules and the legal environment. Setting up the recommended new regulation – to our conviction – would represent major progress in this field. Based on clear and traceable regulation, transparency of collecting and applying public funds can be enforced, irrespective of the economic actor performing them. Enforcement of this is particularly important when – in harmony with international trends – the significance of performing public duties based on various partnerships increases in Hungary, too.

Based on the relevant document issued by the International Monetary Fund, enforcement of the principle of transparency is ensured by:
- unambiguous definition of tasks and scopes of authority;
- wide availability of the information generated;
- publicity of preparing, implementing and reporting on the budget;
- fair financial management.

It is important to emphasize that practical accountability for this requirement may be implemented by way of identical structures of budgets and reports.

The transparency of the budgeting process and the document ensures accountability of the governing power, which is a fundamental condition of fair competition among political parties. This principle is fully enforced if the accepted budgets are implemented. Any processes deviating from the budgets in any direction question the trustworthiness of governments.

Promotion of the principle of publicity is an important peculiarity in the operating frameworks for the rule of law. For public funds, no direct ownership control is in place, and market consumers’ control is only indirectly present. At elections, it is publicity, in addition to the authorised political bodies, that represents the greatest deterring force in terms of avoiding all kinds of irresponsible financial management, political manipulation and crimes (including corruption).
Today’s technological facilities represent almost unlimited potentials for publicity. This principle should be promoted over the whole system of information management, and the “toleration” of publicity should be made mandatory for organisations performing public duties but not operated under the state budget control.

The principle of controllability means that control mechanisms used to prevent improper use, inexpedient and uneconomical spending of public funds should be present in each phase of defining tasks, allocating funds (irrespective of the legal status of the user of public funds), as well as reporting on and settlement of application.

The principle of financial substantiation means that the political preferences should be expressed in the financial plans produced observing the relevant rules, which are at the same time legally accountable. This principle also means that political decisions are passed through a feasibility filter. The process of planning and accepting the budget may be the “technological” and procedural curbs to a one-sided representation of political considerations. The rule-based budgeting practice, i.e. the application of various rules requiring efforts to reach budgetary equilibrium reinforces the promotion of this principle.

Substantial representation of the principle of foresight would be an aim of methodological renewal of budgeting. In the past one and a half decades, overspending for political reasons then the management of the resulting financial crisis have caused considerable damage to the country. In the present budgetary process, hardly any role has been assigned to modern budgeting techniques. The traditional budgeting practice not based on performance is unsuitable to lay the foundations of structural changes to expenses to an extent necessary for substantial changes, or to finance new tasks adequately, to forecast the future consequences of long-term decisions on expenses, and to enforce the requirements of efficiency and results related to spending. The promotion of the principle of foresight requires a strategic approach to be adopted in each area of public policies.

What combined representation of the principles of sustainability and balance means is not merely that the current balance of public finance approaches equilibrium. It is certainly also a very important criterion, as a permanently high current deficit leads to severe indebtedness and an unsustainable situation, and ultimately to a financial breakdown. Sustainable equilibrium, however, also means that no tensions risking economic development or social cohesion are present on the income and expense sides of public finance. For instance, public dues are fairly and predictably distributed, expenses are not influenced by interest groups hunting for commissions and by short-sighted political interests. It is very important that sustainability is ensured through agreements between various types of economic actors (employers, employees), and between various generations – “visible” or “invisible” socio-economic agreements, for example social contracts between generations.

Firstly, the principle of completeness means that each actor should give a fully detailed account on the public funds used. The various financial statements should be produced under the principle of gross settlement. In addition to subsidies from the budgets, the fees paid for public services also constitute public funds, and the application of these should be accounted for just like revenues from utilising state assets. Uncollected public funds (tax allowances and exemptions) and outstanding receivables should be disclosed. The principle of completeness is also important to be emphasized because off-budget liabilities have significantly increased in terms of public financial systems, and so have off-balance sheet items, mostly
future liabilities, represented in the state budget. The principle of completeness is implemented if these items are properly reflected in the government statistics and reporting systems.

Using the principle of specification means that spending, the actual budgeting process and the financial situation are available for decision-makers and taxpayers to study. The principle of specification can be overused. This is the situation today when presentations make it hard to see the woods for the trees. The principle of specification requires concurrent representation of administrative, economic and functional presentation – and with clear compatibility.

The principle of authenticity means that the items represented on both the revenue and the expense sides within the public finance system signify actual resources and spending related to actual rendering of public duties. The current practice of public finance settlement represents a significant tax content under the various expenses, which prevents the promotion of this principle.

REINFORCING BUDGETARY DISCIPLINE

Based on the experience of the past years, the new public finance regulation should no doubt serve the purpose of reinforcing budgetary discipline. In line with EU requirements (convergence and stability), it is necessary for the system of rules for public finance to contain requirements to reach and maintain equilibrium. These are customarily termed budgetary (fiscal) rules or budgetary policy rules similarly to monetary rules or monetary policy rules. In the Theses, the term ‘budgetary rule’ was applied.

The negative impacts of overspending, demand for a stable national (or regional) currency and the financial vulnerability of national economies have led an increasing number of countries to a recognition that budget policy should be forced among pre-defined (strict) rules, i.e. a rule-based budgetary policy should be pursued. Rules are basically used for two aims:

• to stop budgetary overspending, and
• to create space for anti-cyclic budgetary policy.

These two aims are interrelated to a certain extent. On the one hand, because budgetary overspending and the rigid rules restricting it eliminate the possibility of implementing an anti-cyclic budgetary policy. On the other hand, budgetary overspending is often caused by the fact that the commitments assumed in “good” years can only be complied with by the state in “bad” years through indebtedness.

Budgetary rules are often not formulated alone but as a part of a comprehensive economic (adjustment) package. They are varied in terms of legal forms. In certain cases, the budgetary rules are recorded in countries’ constitutions. More frequent is regulation in other laws, for instance, in a comprehensive law on finance. There are examples where the law establishes the major principles only, while the rules of procedure that ensure the desired results are detailed in lower level legislation. Rules may be applicable to the country’s central budget or to budgets within the country (e.g. provinces).

In terms of contents, budgetary rules may be classified in three groups:

• rules designating targets;
• procedural rules;
• rules specifying sanctions and correction mechanisms for a case targets are frustrated.

Rules designating targets in various countries are used to stipulate a level of deficit (surplus) in the current budget, and to define the maximum proportion of public debts.

Procedural rules may be the provisions that stipulate substantiation and transparency of budgeting, and disclosing authentic informa-
tion on budgetary processes. In addition, provisions of law require equalisation funds or reserves to be generated in a number of countries — particularly where the indicators of national economy show significant fluctuation.

In case budgetary targets are frustrated, various replenishing and other corrective measures may be enforced. Particularly typical are these rules of cases when the budgetary limits of units within a country are exceeded.

The budgetary rules are apparently the most efficient when stipulated in high-level legislation. Experience, however, is contradictory. The rules recorded in the Constitution and in laws are often too simplified, rigid and hard to change. Compliance with such generates serious losses at times, on the one hand. On the other hand, such rules motivate certain governments to apply creative accounting and various tricks to eliminate the restrictions deemed irrational. And this is what leads to even more serious problems, loss of credit, covert indebtedness. Consequently, — according to certain opinions — it is expedient for the current government to record and publish the budgetary rules they intend to follow, and keep to them.

Considering this international experience, it is expedient to establish budgetary rules that enforce the requirement of equilibrium for the Hungarian budget. The recommended starting point is that comprehensive requirements of equilibrium for Hungary are clearly determined by the convergence programme, then, following accession to the Euro zone, by the Maastricht criteria. Consequently, the rules applicable to Hungary should contain regulations that prevent an excessive deficit at the root: provide no facility for over-budgeting for revenues, for automatically exceeding the majority of expense appropriations, overspending from social security funds or dedicated state funds.

A development of recent years is that the financial risks incurred by the local government sector has an increasing role among the factors jeopardising stability. Handling these by adequate rules, re-regulating the conditions of borrowing and other long-term commitments is a task that cannot wait. On these grounds, the following types of budgetary provisions should be reasonably incorporated in the new regulation:

It may be required for the central level, for instance:

- mandatory equilibrium of off-budget funds, no borrowing is permitted;
- the debt service of central budgetary debts and the reduction of public debt should be financed from the primary budgetary surplus;
- liquidation of assets or concession revenues should be used to repay public debt;
- an upper limit to government guaranty or warranty.

It is reasonable to record for local levels that, for example:

- there is no passage between the current and accumulation budgets, and the current budget cannot generate a deficit;
- local governments may borrow liquidity and capital investment loans (the upper limit of indebtedness should be restricted — following adequate modelling —, subject to financial capacity), and guarantees and accounts payable should be considered when calculating the loan portfolio;
- liquidation of assets or concession revenues should be used to repay local government debts.

These rules, also currently effective in part, are capable of guaranteeing long-term financial sustainability of the whole budget, if complied with. Accountability for these rules may be ensured by clear-cut rules of the financial management. In addition, a more transparent and stable regulation of sharing public dues is necessary for welfare systems affecting multiple generations and high-value developments to
enforce the principle of sustainability, compared to the current one.

In order to reinforce budgetary discipline, the regulation related to auditing public funds should also be reconsidered. Based on various documents issued by INTOSAI, the International Organisation of Supreme Audit Institutions, the principles of external auditing in the governmental sector need regulation. For internal audits, the standards of the Institute of Internal Auditors (IIA) are justified for use. On re-regulating the audit system of the public sector, the triple requirement of effectiveness, efficiency and economy is deemed necessary. Audit performed on an effectiveness basis facilitates public funds to be spent in a compliant and expedient way, reduces the financial and operating risks of the public sector, and contributes to the promotion of transparency. It is not indifferent, however, what resources and cost relations were used and met to achieve results. We consider it desirable to enforce the requirement of effectiveness beside better utilisation of existing capacities and cost-efficient solutions. It is important to define the various auditing organisations, and the distribution of work among them. A reference should be made to the facts that an important role is assigned to professional audits besides financial audits, and that cooperation between financial and professional auditing organisations is necessary.

For local governments and state funds, the current form of private audits – not denying the importance of its role – needs reconsideration, and a closed system of these should be established. The auditing system of the local public finance level should be regulated cautiously – in line with the peculiarities.

The full enforcement of the principle of controllability as discussed above does not, in its initial phase, mean the strengthening of external and internal audit functions, instead, it means that control mechanisms aimed at preventing the ineffective, inefficient, and uneconomic allocation of public funds should be in place in each phase of the definition of duties, allocation of funds (regardless of the legal status of the entity using the public funds) and reporting on and accounting for such funds. It is only by building on such internal mechanisms that post-facto internal and external audit functions can be defined better and more specifically. The role of independent internal audit is to ensure that internal control mechanisms are adequate, and that operational risks are identified.

Besides creating the organisational conditions of internal controls it is necessary to elaborate a system of performance indicators that follow the process of spending the funds from the moment of planning through the implementation phase all the way to reporting/accounting. Performance indicators open an opportunity of monitoring financial or professional processes and of controlling functions at an organisational level, branch level or government level, which also enables interference if necessary.

Upgrading regulation requires the enactment of the key sections of the present legislation of statutory regulations and government decrees, and bringing the concepts and solutions in line with international standards.

**MODERNISING THE PROCESS OF BUDGETING, FINANCIAL MANAGEMENT AND REPORTING**

Many of the countries ahead of us have proved that performance requirements towards the whole public sector, its branches and individual actors result in a surplus. Especially important is the adoption of the principle of performance orientation as early as on budgeting, because this element of financial management decisively determines the other processes of economic
management. On planning appropriations, the purpose of the recommended expense, the method of achieving the goal, the proposed resources and justification for the expense amount should be presented. Performance indicators should be widely used for designating and calling to account for goals. In case of changing appropriations, the same requirement should be enforced.

The practice of the domestic budgeting process needs comprehensive renewal. The current baseline budgeting is unsuitable both for enforcing performance requirements and for laying the foundations of the necessary structural changes. The current practice of residue planning conveys unilateral fiscal considerations towards the actors within the sector, who use adequate techniques for formally adapting to these restrictions, but are incapable of substantially renewing their financial management. There is no alternative to pursuing the goals of financial equilibrium, however, without in-depth changes, the re-generation of equilibrium problems is inevitable.

Performance orientation is ensured by a requirement to apply the practice of programme-based budgeting to specified areas of expenses, to monitor the implementation of the budget, and to institutionalise performance auditing.

The expense side budgeting needs to be performed in two major groups. A part of expenses continues to be planned in an institution-centred way, using the resource requirement for maintaining the capacities seen as necessary. In the new regulation of public finance, we recommend these to be termed as institutional2 budgeting. Typically, this principle is applicable to organisations of public authorities, i.e. state organs, administrative, judicial, defence areas, as well as law enforcement. Performing duties here may only be exceptionally assigned to an organisation outside the central budgetary control. The voting unit in this case is an institution. For institutions, a few basically characteristic natural input details (headcount, office space, number of pieces of equipment, etc.) are also used as the basis of the appropriation. Budgetary decisions here apply to the recognition of justifying planned resources. Planning these capacities does not necessarily mean budgeting from the baseline. It is possible that, on using various due diligence processes, a particular capacity can be provided through a different combination of resources, and it is also conceivable to produce an expense item for a new task by way of zero-based budgeting. The point in this case is that no accountability for the quantity of specific services (e.g. number of convicts) and impacts (e.g. a reduced number of robberies) can be demanded. On amending sectoral laws – e.g. if the technical parameters of prisons are intended to be changed – a financial impact study may be based on the projected resource parameters.

In order to improve performance orientation, it is desirable to budget a significant portion of expenses as programme-based, and this proportion – due to improving extent of preparation – should grow in the course of years. When using programme-based budgeting, another issue to be decided is the legal status of the organisation that performs the tasks, given that off-budget organisations may also be suitable to carry out programmes financed from public funds.

Programmes may be permanent or temporary. For permanent programmes, some expenditure appropriations may be determined as a result of earlier decisions, which are not voted on. Accordingly, the budgeting document will contain appropriations disclosed for information purposes, appropriations mandatory as a result of earlier determination, and (free) appropriations subject to actual decisions. This is where the requirement to attach a financial impact study to the acceptance of each law on providing sectoral services gains importance. In
the possession of this, the political body is able to exercise its budgetary rights. The structure of programme-based budgets is shown in the Figure 1.

Placing the budget on performance bases requires a new approach in reporting on implementation. An important function of reporting is to present the performance dynamics, in addition to calling to account. For the units subject to the practice of programme-based budget, reporting on the programme adjusted to the life cycle of the programme (capital expenditure, government action), i.e. aimed at presenting the results thereof is also necessary in addition to periodic reporting and reporting in the final account. In the area operated under the system of institutional budgeting, only reporting on monitoring and final accounts are necessary. The final account document shall consist of a numerical financial report and a report on the implementation.

It is our conviction that the later the transition to the new budgeting methodology, the slighter the chance for parallel public policy reforms to achieve their actual goals.

The practical implementation of the principle of being performance driven depends, in addition to the modernity of planning, primarily on the quality of internal control. By internal control we mean both the system whereby the financial management of government (local government), ministries, and the associated institutions (appropriations, funds) are run, and the control systems within the individual budgetary institutions. Upgrading internal control systems has become an issue of key significance for several international organisations over the last few years. During that period they specified the most important standards in conjunction with internal control, and created numerous relevant standards. Some international organisations even stipulate the existence of an appropriate internal control mechanism in the agencies cooperating in using the funds as a condition to the disbursement of aids and loans. Using financial resources from the EU’s common budget is

| Decision-maker | Government function | National Assembly/or representative body of local governments | Government/or representative body of local governments |
| Responsibility | Cabinet minister or a delegate | Undersecretary or a delegate | Institution head or delegate |
| Approximate number of items | 30–40 | 200–300 | 1500–2000 |
| Example 1 | Education | Higher education | Determine an admission limit for each field of education |
| Example 2 | Environmental protection | Sewage treatment | Construction of a sewage treatment plant increasing fines |
| Example 3 | Education | Public education | Funding normative state contributions funded by teaching job Development of local government participation |

Figure 1

**STRUCTURE OF PROGRAMME-BASED BUDGETS**

<table>
<thead>
<tr>
<th>Major programme</th>
<th>Programme</th>
<th>Sub-programme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Government function</td>
<td>Voting units</td>
</tr>
<tr>
<td>Decision-maker</td>
<td>Government function</td>
<td>National Assembly/or representative body of local governments</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Cabinet minister or a delegate</td>
<td>Undersecretary or a delegate</td>
</tr>
<tr>
<td>Approximate number of items</td>
<td>30–40</td>
<td>200–300</td>
</tr>
<tr>
<td>Example 1</td>
<td>Education</td>
<td>Higher education</td>
</tr>
<tr>
<td>Example 2</td>
<td>Environmental protection</td>
<td>Sewage treatment</td>
</tr>
<tr>
<td>Example 3</td>
<td>Education</td>
<td>Public education</td>
</tr>
</tbody>
</table>
conditional upon the minimum requirement that the national organisations receiving the funds should have an internal control mechanism compliant with the standards set by the EU. Despite these international tendencies domestic legislation fails to handle the issue in accordance with its weight. There are hardly any standards of internal control in governmental and local governmental systems, and the individual institutions have excessive freedom in designing their own internal control system without a detailed central requirement. However, some progress has been made over the past few years in some technical issues (e.g. risk analysis). While internal control systems are under-regulated, there is excessive emphasis on the internal audit system, which, in our best judgement, is positively over-regulated.

Both budgeting and on-going performance evaluation would suppose a management information system that is well founded, based on data immediately derivable from accounting and reporting information, but is clearly more than just that. Prescribing compliance with the practice of programme-based budgeting could trigger significant progress in this area. Before selecting the possible solutions, it is necessary to study best international practice, and the embedding of these in their own systems, and their legislative environment. As regards the management information system, it is sufficient to prescribe its mere existence so that the legislator empowers the government agency concerned or the local government to create it through a decree.

WHAT IS NEXT?

By formulating the theses on the regulation of public finance, the State Audit Office has produced a compilation to find a common denominator – necessary for the consent – which, instead of closing, is intended to catalyse the work aimed at modernising the regulation of public finances. In the Theses, we did not intend to formulate a detailed regulation concept that could be immediately used for codification. On the contrary – in harmony with the act on legislation and the requirements of quality legislation – we consider it necessary for detailed impact studies to precede formulation of rules. In the course of this, in addition to assessing the general social and economic impacts of a more modern but stricter regulation, particular attention needs to be paid to the institutional and structural changes necessary for new tasks, to establishing the conditions of adoption and that the rules applicable to the central and local levels of public finances should be duly differentiated and harmonised at the same time.

To conclude my article, let me thank the staff of the Research and Development Institute (RDI) of the State Audit Office of Hungary and the external cooperating experts for their work carried out in order to develop the “Theses on the regulation of public finances”.

With the participation of its research base, the SAO is prepared to take part in the future in the preparation of the new public finance regulation in the form of quality legislation.

Notes

1 A voting unit is the smallest unit of a budgetary decision, which contains expected results and expenditure ceilings in both textual and numerical formats. In other words, it is an obligation to perform duties, which contains a specific description of the task, the outputs of performing the task, the necessary physical resources, inputs (headcount, classification, the amount of physical capital in a given case), and finally, the feasible expenditure ceiling.

2 An institution is not an organisation. An institution (e.g. police) may consist of multiple budgetary institutions and organisations pursuing independent financial management.
The statement that Hungary’s central budget is struggling with dire problems has now become a cliché. In spite of considerable austerity measures, the country’s deficit in 2007 is expected to be in the range between 6 and 7 per cent in terms of GDP, which would be a substantial improvement from 9 to 10 per cent recorded in 2006, but cannot be considered acceptable by any other standards, not even in the short term. Adjustment plans do not stop here of course, targeting a gap of less than 3 per cent in terms of GDP. But, aside from statements uttered by politicians emphasizing their personal commitment, taxpayers have relatively few guarantees to be assured that failures of past attempts at cutting back budget deficits will not recur this time. Hungary has a track record of producing deficits of around 8 or 10 per cent, but since all previous records—of a rather questionable nature—were broken in 2006, the time has come to ask the question: What guarantees are there to prevent it from happening again in four or eight years’ time?

Some structural reforms have been started; a very important achievement, good news indeed, but unfortunately each and every reform has to be successful for the announced budget path to be attainable. Safety reserves of the convergence program are not contained in additional unannounced reforms but in conservative estimates for the results of the first years. This involves serious dangers. If the budget situation turns out to be somewhat better than expected and it leads to a waning reform enthusiasm or even triggers a step-up in the government’s inclination to increase the deficit, then any plans for deficit reduction of future years will go out the window, too.

According to international experience, this is typically the moment in the schedule of economic policy adjustments and reforms when the system of rules and institutions of fiscal discipline should be renovated.

A great number of studies have been made in regard to the central budget’s system of rules and institutions. Von Hagen (1992) and Gleich (2003) attempt to quantify and compare system characteristics of European Union member states by using composite indices. Hungary was definitely a poor performer in the 2003 comparison (managing to outstrip Romania only).

The Hungarian budget regime was reviewed by the OECD in the spring of 2006, establishing...
that, in light of international practice, Hungary’s budget-making process includes some features that particularly increase susceptibility to overspending and revenue overtargeting.

All this originates from the fact that in spite of regular adjustment campaigns—including the adjustment and reform program of 1995, popularly dubbed the “Bokros package”—institutional reforms across the entire budgetary system have never been made in Hungary. This study aims to provide viewpoints and suggestions in three areas to this cancelled yet long-needed reform.

Fiscal rules can be interpreted in a narrow and a wide sense. According to a definition formulated by Kopits and Symansky (1998), fiscal rules are constant criteria referring to the development of certain aggregate budget indicators (such as deficit, public debt, expenditures). These indicators can be calculated in nominal or real value, or in terms of GDP, and the criteria may be of legal status (defined in the Constitution or the statute for public finance), or may manifest themselves as part of a coalition agreement, or in the form of an unwritten rule (provided the parties involved will observe them). The mutual objective of fiscal policy rules is to rein the outcome expected from the execution of the Budget Act.

Fiscal rules, as interpreted in a wider sense, include the rules of how the budget is made and implemented. These procedural rules may relate to the work of the administration; the finance minister’s special licences; the rights of MPs and parliamentary committees in plenary debates; public access and control of information, et cetera.

Solutions promoting the transparency of budgetary processes are to be highlighted among procedural rules. These include mandatory content of data, forecasts and analyses including the way they are released; and the establishment and operation of a budget office or a macro-economic analysis institution, both of which should be independent of parties and the government. The mutual objective of rules that ensure transparency is to provide the professional and general public with an accurate and easily digestible image of the current financial position and outlooks of public finance with as short a delay as possible in order to enable the public to exercise real control over the cabinet’s activities.²

Considering of all the above-and not on the level of generalities but specifically in relation to the current situation in Hungary—this study aims to describe suggestions that take long-term considerations into account³ but are executable in the short term in all three areas in order to further fiscal discipline.

For reasons of length, this study does not address possible ways of transforming these suggestions into laws; this should be done after professional debates of the concepts have been made. It should also be noted here that a performance-oriented transformation of the central budget is not addressed here. Introduction of performance monitoring and a new type of management in the public sector requires the budget presentation to be transformed into one of program-orientation, but this is a problem entirely different from budget discipline and transparency.

TRANSPARENCY

Even though an increase in transparency seems only to be a derivative component in the system of fiscal institutions, in fact no well-operating system can be conceived without it. A system of rules cannot be based on anything else but existing, public, reliable, and realistic information. Therefore, the line of suggestions to be made by this study shall be started with the recommendations that ensure transparency.

Of the international literature addressing the transparency of budget systems, studies by Kopits and Craig (1998) as well as OECD
(2001) should be underlined by all means. The majority of statements in a comprehensive study of transparency made by P. Kiss (1998) have unfortunately not lost their actuality, because a 2003 law, popularly dubbed the Glass Pocket Act⁴, has introduced rules to improve transparency in the scope of cash-flow management and subsequent control only, failing to bring progress in budget data and planning. Some of the topics covered there (such as public procurement, public employment) are not addressed by this study as it intends to focus decidedly on the budget regime.

Some possible reasons for rules to improve transparency

**Credibility**

Risk premia, incorporated in the expected yields of forint-denominated government securities, increase the interest payment obligations of the budget considerably. Projected to the forint-denominated public debt of HUF 11,000 billion, it currently amounts to 3 to 3.5 percentage points over euro yields⁵, causing HUF 350 to 400 billion, mostly unnecessary, excess annual expenditure (corresponding to 1.5 to 1.7 per cent of GDP). Risk premia actually reflect investors’ uncertainties. Investors want to be certain not only of a disciplined budget policy but they also want to be sure that no such information is hidden from them that could be essential from their point of view. When a budget policy gains credibility with market players, this risk premium could drop substantially, which, in addition to freeing budget inputs, reduces medium- and long-term interest rates that are relevant for market players (such as the rates of mortgages and corporate investment loans). This, in turn, could increase economic activity, accelerate economic growth, thus increase tax revenues and reduce the deficit further.

**Limitation of a race in unsubstantiated promises**

When the data that give a true reflection of the budget’s position and outlooks are disclosed to the general public, opportunities will diminish for the opposition of the time to utter unsubstantiated promises with no risks as to implementation and thus force the governing party of the time to come up with similarly unrealistic pledges—in which case there is a risk of implementation.

**Constant improvement in the quality of planning**

It is essential for the constant improvement of the budget system that it should be given constant incentives in the form of professional debates and independent analyses in order to improve the quality of data output and to develop methodology.

**Proposed set of rules to improve transparency**

**Classifying budget items**

Documents of the Hungarian budget currently available actually make only one distinction between various revenue and expenditure appropriations: The actual figures of revenue items and some expenditure items may depart at any extent during the year from the extent set forth by the law (commonly referred to as automatically overshooting or open [uncapped] appropriations), while the (numerical) majority of expenditure appropriations cannot exceed the extent defined by the law (closed [capped] appropriations). When the legal limitation of closed appropriations are reached, the treasury simply effects no more payments from this scope. Open expenditure appropriations are, by definition, based either on legal eligibility (such as pensions, family benefits, per capita subsidy in education, etc.) or on civil law agreements
that bind the government (such as interest payments of public debt, redemption of state guarantees, payments originating from litigation).

To file a bill which, say, aims to give families HUF 4 billion more subsidies, to be financed from higher VAT revenues resulting from this measure, is nothing but the illusion of control. It should be underlined that the documents of the budget proposals and the process of approving the relevant bill should be able to differentiate between various items, but at the same time it is not obvious where and upon what principles the border should be drawn. Making distinctions between items will be significant primarily from the aspect of fiscal rules, because they will clarify what items the government will be able to influence in the short term, and, subsequently, what the government is legally accountable for.

Items that in fact cannot be decided by the parliamentary vote of the budget bill because they are included in other bills (tax laws, pension laws, etc.) or possibly defined by macro-economic or demographic variables (outside the control of the Parliament) are defined by U.S. terminology as mandatory. Non-mandatory items that depend on the free will of legislation are defined by U.S. terminology as “discretional”.

The controllability of a budget item could be assessed from at least three aspects:

- institutional level of decisions (parliament, cabinet, institution),
- type of risk factors (business cycles, demographic trends, exchange rates, etc.),
- minimum time required to eliminate the item.

Items ultimately decided by institutions are not regarded really controllable, because this method makes it hard to check whether the rule based on them is observed.

Items whose total depends mostly on business cycles (tax revenues primarily) are of particular significance from the aspect of economic policy, because they could act as automatic stabilisers. If automatic stabilisers are to exert their impacts at a maximum rate, they should not be managed in the same scope as the items defined by the annual budget process are. Fortunately, control over the majority of items sensitive to the business cycle are borne by the Parliament.

A large number of budget items can only be terminated on paper, because the government’s task provision obligations do not allow the actual elimination of these spending items. Theoretically, the budget act could set forth zero forint for education subsidies, but obviously this would not be a solution to the problem. Long-term agreements bound by civil law could considerably reduce the manoeuvring space of budget policy in the short term, but a proliferation of such contracts should not be regarded as “an external factor” that is independent from the government. Instead, suitable decision-making mechanisms should be put in place and implemented in order to establish appropriate control.

We recommend that primary items that are approved by the Parliament in substantive laws and whose annual total are not influenced directly either by the Budget Act or the cabinet should be classified as mandatory budget items. All other items should be regarded as discretionary items, including, in line with this definition, tax revenues (including tax allowances), pensions and other related benefits, compensation life annuities, payments to the European Union, the wage of the President of the Republic and the Members of Parliament). Very inflexible they may be, but obligations originating from PPP agreements with terms between 20 and 25 years should not be regarded as mandatory items, because these amounts are not stipulated by substantive laws. Neither should an investment project spanning years be regarded as mandatory spending, because the government does have the opportunity to fine-tune spending in any given year by modifying invest-
ment schedules. With time, the Parliament will obviously be under considerable pressure to put in law the amount of items preferred by some interest groups, removing them from the annual budget bargaining. It is of utmost importance for the government and the Parliament to stop narrowing their own room for manoeuvring.

Additional classification is needed in the scope of discretionary items, because the parliament often makes decisions regarding obligations that span several years or authorises the government to take on long-term obligations (in case of investment projects that last years, for example). When a civil law contract has been made on the basis of such authorisation, the government may not modify it unilaterally even by a law. Consequently, distinction should be made between old and new budget items, in line with U.K. terminology. Defined by mandatory items and old budgets, discretionary items are already determined when the bill for the year is addressed, therefore “free items”-items outside this scope-are the only ones to be put to the vote. Accordingly, budget documents shall clearly separate various item categories. The parliamentary vote should be applied to new, discretionary-free-items (this is why they are also referred to as vote items), and the balance, which includes items determined previously, is merely acknowledged by the Parliament.

The table below summarises various appropriation types, focusing on the fact whether the distinction is made from the fiscal policy rule’s or the procedural rule’s point of view:

<table>
<thead>
<tr>
<th>Fiscal rule</th>
<th>Item type</th>
<th>Parliamentary vote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory items</td>
<td>Tax revenues and eligibilities/authorisations</td>
<td>Determined items</td>
</tr>
<tr>
<td>Discretional items</td>
<td>Inherited items</td>
<td>Voting items</td>
</tr>
</tbody>
</table>

If the law can make distinctions between discretionary expenditures “inherited” from new and old budgets, there is no obstacle before the Parliament to approve multi-annual programs at their totals, unlike the current practice when approvals are given implicitly-with rare exceptions-via the inclusion of the first year's outlay in next year's budget. (Pursuant to the Public Finance Act, institutions have the right to take on obligations beyond the current year within certain limitations, but this will not make the total of the actual obligation visible).

A POSSIBLE WAY OF TREATING INHERITED BUDGET ITEMS

The problem of treating inherited items is to a large extent similar to that of unspent appropriations in the current system. By showing “revenues”, “expenditures”, and “central subsidies”, the current presentation implicitly assumes that the stock of unspent appropriations at the end of the year will be the same as it was at the beginning of the year. This is the very reason why the stock of unspent appropriations can jeopardise the deficit target: Based on previous year’s decisions, ministries and institutions have authorisation for spending amounts not allowed for in the current year’s budget. It would be advisable to plan explicitly the change in the stock of unspent appropriations in the current budgeting system as well, not in a binding way of course, but only as additional information. It is easy to treat inherited items if the parliamentary presentation of the budget is supplemented by two further columns, expected stock of unspent appropriations at the beginning and at the end of the year (hereon referred to as “residual”). Multi-annum programs can be budgeted at full cost in the first year as central subsidy, while expected outlay in the first year is shown in the column “expenditures”, and the rest is put in the last column “expected residual at the end of the year”.

In the second and subsequent years, the Parliament does not have to take decisions (at least not in the course of the budget debate unless the project is to be granted additional subsidies), only a part of the initial stock of unspent appropriations can be shifted to the column “expenditures”, while the rest is left in
According to the recommendations outlined by this study, the scope of uncapped appropriations could only include those that are subject to macro-economic or demographic factors. This way, no items that are independent of such factors could be classified as uncapped items because of technical uncertainties. Likewise, today's uncapped items, and also mandatory items, as defined by the new terminology, should be identical in the case of expenditures, provided the principles of uncapped systematisation are employed consistently. Revenues including items (income from selling state assets, for example) that are currently under the uncapped heading, however, should be classified as discretionary items in reference to their content. If these are not forecast with proper accuracy for the benefit of market risks, then expenditures that will certainly be effected shall not be charged against these revenues.

Alignment of accounting rules to best international practice

One of the major sources of transparency problems (and sometimes the basis of abuses) present in Hungary's current budgeting system is the fact that the parliamentary documents are prepared on the basis of accounting rules spelled out in Hungary's Public Finance Act, whereas the country's budget policy in the medium term is defined by convergence programmes that are based on the European Union's ESA'95 rules. It would be prudent to align the Hungarian rules to ESA'95 as close as possible in order for monthly cash-flow data recorded in the Hungarian accounting system to provide as much information as possible about the likelihood of medium-term targets to be attained.

Although the implementation of an ESA-compliant, modified accrual-based accounting system to replace the current Hungarian system of modified cash-flow based accounts is not recommended by this study, some items that represent replacements for financial instruments (such as return of accounts receivables, loan provision) should be eliminated from the balance, and the scope of legal public finance should be extended to an ESA-compliant, wider governmental sector. The introduction of a sub-category “budget corporates” is also conceivable for state-owned corporations that fulfil public tasks and are financed publicly, for which corporations the state shall, for various reasons and at least implicitly, take responsibility. Obviously, creditors of the National Motorways Co. Ltd. or the Hungarian Television Co. Ltd. will not be left out in the cold even if these corporations lose all their equity, because the state is going to repay credits (based on universal liability, for example). The scope of public finance entities defined by the current Budget Act cannot be interpreted from the aspect of economics because it does not include these corporations. If public finance is regarded as a legal and not a presentation category, then the consolidated balance of the central budget and budget-financed corporates should not be voted by the Parliament, and it would be meaningless, too. However,
pursuant to the Public Finance Act, the debts of these corporations could well be limited by law (and it would ensure for the government to substantially increase its control over the Maastricht criteria on public debt).\(^\text{15}\)

The best international practice recommends other techniques in addition to the ones mentioned above in order to be able to provide as transparent and realistic an image of budget processes as possible. According to the principle of gross accounting, transactions shall be accounted and the data presented not in terms of net cash flow but economic content. In the case of certain budget items it could be beneficial to depart from the general cash-flow based approach of the parliamentary presentation and apply an accrual-based accounting, because otherwise the image of the budget could emerge seriously distorted. The comparison of cost/benefit analyses requires related costs and benefits to be recorded and accounted under the same headings, if possible. Although not included among the general principles of accounting, this method could be called the principle of “activity-based costing” for the sake of simplicity, for it says that each budget expenditure shall be accounted at the very same item for which they are created. Consistent application of these principles are important not only for transparency but for allocative efficiency, as well.

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**GROSS ACCOUNTING, MODIFIED CASH-FLOW APPROACH, ACTIVITY-BASED COSTING**

The way state assets are managed by Hungarian Privatisation and State Holding Co. is one example of disregarding the principle of gross accounting, as the asset management agency spends a substantial proportion of income realised from utilising and selling assets in a way that these are recorded neither in the revenues nor the expenditures side of the budget (for example, the entirety of privatisation reserves are included in this scope).

Modifying the cash-flow approach has been done in respect of a number of items (for example, debt write-offs shall be accounted as expenditure appropriations, increasing the deficit), but it would beneficial if the year-end total of various pending items were divided appropriately and re-accounted to their appropriate headings for the year that has just ended. A new accounting method for PPP projects would be another possibility of modifying the cash-flow approach to be considered. According to ESA 95 methodology, availability fees of proper PPP projects are to be accounted in the deficit, the investments themselves are not charged against the budget if the invoices are paid. It is obvious, however, that availability fees do include the price of investments in addition to the current costs of services and financing. Accordingly, in Sweden for example, the price of investments of PPP projects at the moment of finishing are shown in the parliamentary presentation of the central budget, which of course does not impact the content of the contracts but does improve transparency.

Activity-based costing is also violated in the scope of state cash-flow management, because state-owned institutions do not pay interest on the state funds they use (for example, when using up budget appropriations quicker than scheduled), nor is any interest given when an organisation manages to pay as late as possible (in line with its contracts, not defaulting of course). Total costs of undisciplined fund management are currently accounted among the interest payments of public debts, which, in turn, means that these burdens are borne by disciplined organisations as well, thus undisciplined ones are in no way incentivised to alter their conduct. Applying an internal interest rate would mean an “overgrossed figure”, because it increases both the revenue side (Treasury) and the expenditure side (institutions), but this item is (not expected to be) as high as to distort the full picture, and, on the other hand, a legislative solution would be easy to find to adjust totals appropriately (for example, interest payments should be reduced by the amount institutions have refunded to the Treasury).

An example of the combination of gross balance and performance-oriented method is the way earnings realised by state-owned corporations are accounted. According to present regulations, withdrawn dividends shall reduce the deficit, and an equity raise increases it. The way balance of payment statistics
handle the earnings of foreign-owned corporations is a more transparent solution. Here, total earnings impact current accounts, and if foreign owners withdraw only part of their earnings as dividend, then the difference is accounted in the capital balance as reinvested capital. Likewise, in the case of state-owned corporations the total earnings in terms of the state's shareholdings (be it profit or loss) should be accounted in the deficit, and if financial transactions show any discrepancy, then it should be regarded as a financing item. This accounting method would render various, and often confusing, solutions (or even manipulations) related to financing state-owned corporations unnecessary and pointless, because the budget balance is affected similarly if the corporation in question receives subsidies from the budget in advance or it borrows instead and the debt is assumed by the budget subsequently (motorway construction, for example).

Managing various tax allowances (employee tax credits, charity payments, certain R&D expenses, etc.) is an example of applying gross balance and cost bearer's burden in a combination. Current presentations do not list them as gross figures, instead, the revenue appropriations originating from the tax type in question are merely reduced (an orientation table is usually included in the final accounts). This practice decreases transparency for two reasons. One, neither decision-makers nor the general public is aware of the budget impacts of decisions and, therefore, these expenditures in fact do not compete explicitly displayed expenditures, even though they likewise act as the means of accomplishing certain objectives in economic or social policy. Also, the fact that no appropriate and public estimates are made of the budget impact of these measures ex ante, there is opportunity for ex post controlling of either the success of the decision or the quality of the ex ante estimates, which, however, would be essential to a learning process. It is of utmost importance that the current practice should be altered as soon as possible to record tax allowances in the expenditures side of the accounts.

Sureties and guarantees pledged by the state are also an example of applying gross balance and activity-based costing combined. It happens all too often that the state, considering the obliged party's financial standing, waives payment of guarantee fees. State guarantees may be an optimum solution from the aspect of the national economy, but it should be noted that the obliged party has in fact received a subsidy. It is no coincidence that the European Union has this “subsidy content” accounted, for it could distort competition in the case of market players. According to the most recent amendment to the Public Finance Act, the principle of gross accounting has been implemented in that the legal maximum of guarantee fees shall be accounted as revenue in the case of all guarantees (because, according to market logic, the actuarial value of a guarantee is usually incalculable), and if the obliged party should pay less than that, then the difference shall be accounted as expenditure (subsidy). It would be a progress in the presentation in this scope if the waived parts of the guarantee fees were accounted by the budget at their relevant headings (for example, a free guarantee represents a valuable subsidy for cultural entities and it is not meant to display the finance minister's extravagant spending).

Giving away real estates owned by the central government to municipalities, foundations, etc. free of charge is a third important example. When the gross balance approach is used, cash subsidies should be accounted first for the beneficiary then the beneficiary would use this sum to purchase the real estate on paper. Considering the fact that real estates, being a tangible assets, shall be accounted when sold as revenue in the current system, the budget balance would not change even in the gross balance system, but the value of the real estate would become transparent as a subsidy granted to the beneficiary sector.

The combined lack of applying these three approaches is demonstrated best by the usage of state-owned real estates. Currently, state institutions do not pay any rent for using state-owned real estates, but rent shall indeed be paid when private sector players use state-owned real estates or when state-financed institutions rent real estates from market players. The budget's balance in the case of state-owned real estates deteriorates at the moment when investment/purchase or renovation is made, while the rent of market real estate includes depreciation. Renovation costs of state-owned real estates are often accounted among the expenditures of the Treasury Property Directorate, an organisation representing the owner, while market-based rents are accounted in the individual ledgers of actual tenants. As a result, on the one hand, the state's various task fulfilment methods cannot be compared, and, on the other hand, certain institutions feel a strong urge to retain useless real estates because it will not produce extra costs but “excellent revenues” can be had by them in times of austerity (provided the finance minister authorises such an action).
Making data, forecasts, and methodologies public

Although the current practice falls very short of a desirable standard, it is obvious for all that neither professional nor public circuits can hold high-quality debates about budget policy when public data of appropriate quality are not available. It would be a significant step forward in this respect if the detailed actual data reported to various international organisations—the European Union, primarily—were available to all, and organised in the form of time series. Time series would ensure the opportunity for members of the professional public to analyse and produce substantiated estimates and forecasts. In lack of them, it cannot be decided whether a piece of new data is surprising or not, which strongly questions the foundation of political debates on budgetary issues. The professional quality of such debates may be improved if the explanation of budget bills (and final accounts) included analytical sections which could direct attention to deeper and farer-reaching issues of budget policy, and would base the explanation of individual items on macro-fiscal effects wherever possible, and not on an incrementalist approach comparing everything to the previous year’s data.

In the case of items with particular importance (such as main tax revenues and major entitlement expenditures), it would be advisable to conduct detailed impact analyses in the explanatory part of budget bills to display the impacts of changes in various presumptions on budget expenditures and revenues (for example, the impact an unexpected one-percentage-point drop in inflation would make on VAT revenues). In order to improve the quality of impact analyses, it is necessary for the budget reports to show (even on a quarterly basis) not only the extent at which appropriations have been fulfilled, but they should provide numerical analyses of the factors that have impacted them, particularly the effects of unexpected developments in macro-economic and other factors.

The credibility of analyses and forecasts is a much more complicated matter: Constant feedback is needed in order to improve permanently the quality of forecasts. One form is to make the methodology of budget bill forecasts public, and an even more preferable case is when external experts are able to fully reproduce the forecasts.

Should the macro-paths, predicted on the basis of the latest actual figures, as well as consequent forecasts of mandatory items be submitted to the Parliament several times a year (say, quarterly), then decision-makers could prepare for modifications and measures required in the following year in a timely manner (to avoid gung-ho cutbacks, popularly dubbed the “Lawnmower Principle”). The system of making quarterly assessments of the budget’s position would be in full compliance with a new legal approach according to which entities in charge of individual budget chapters shall report to the government each quarter whether the expenditures of their chapters (including automatically overspending, uncapped appropriations too!) would overshoot the levels set forth by the annual budget act.

In order to make the impacts of various alternative bills and other possible measures comparable, a long-term base-line projection about the budget is required, against which the quantified impacts of each alternative can be measured. This base-line projection can be prepared in several ways.

According to the method used in the United States, only the letter of laws and effective agreements is what matters (legal determination): Whatever is not written in them does not represent a determining factor. Of course, such a scenario does not lead to realistic forecasts, nor is it its duty, but only to...
provide a basis against which various proposals are considered.

An assumption can be made, for example, that neither laws and agreements in force nor political preferences change. As one of the possible formulations, the real value or ratio of legally undetermined items do not change in terms of GDP. Since macro-paths change much less in this base-line projection, a market consensus derived from calculations made by research institutions and analysts may be regarded as an acceptable macro-path. This version may be called a no-policy-change scenario (hereafter, NPC), because, in a sense, it answers the question: What’s going to happen if nothing new is decided? As it has been suggested above, public reports on the budget’s position and expected path should be made each quarter, it is recommended likewise that the NPC scenario for the current year and two subsequent years should also be updated quarterly and made public.

The Act on Legislation prescribes that the impacts of laws shall be analysed before they are adopted. Although the law does not state it, the budget impact is obviously one of the most significant economic effects, but hardly any examples are to be found in practice where these impacts are demonstrated. If the Parliament really demanded that the explanations of bills and amendment proposals should contain impact studies on the budget in appropriate quality (taking the most direct effects into account, for example), then fewer proposals would be created and the decisions on them would be more substantiated.

All this is important not only for the required learning process to start and the quality of databases and forecast methodology to improve substantially as a result of feedbacks, but also because government plans and programs defined for various terms cannot be aligned without them. Currently there is nothing to ensure harmony between the National Development Plan, submitted to the EU and having a time frame of seven years, and the Convergence Programme, spanning three years, and annual budget acts, thus, in turn, nothing guarantees that targets made in the planning centres of various sectors (and, consequently, special bills submitted to the Parliament, such as the Motorways Act, passed in 2001) could fit with any sustainable macro-fiscal frames.

Independent budget institution

One of the most powerful tools to ensure budget transparency would be the establishment of a nonpartisan and well-informed budget institution. Such an organisation, named perhaps Parliamentary Budget Office (hereon referred to as PBO), would be able to act as an appropriate democratic counter-weight and prevent abuses of the information advantage of the executive power. The most prominent example is the United States Congressional Budget Office, but independent budget institutions play an eminent role in some European countries as well (including the Central Planning Bureau in the Netherlands, and the Federal Planning Bureau in Belgium). In the Hungarian landscape the State Audit Office fulfils PBO tasks, in that it provides preliminary opinion of the government’s budget bills and prepares reports to the Parliament whether the appropriations and other estimates are to be considered sufficiently substantiated. According to a strict interpretation of the law, the State Audit Office has no authority to recommend alternative figures to replace faulty calculations, although there are no legal obstacles to present its own calculations in order to support its opinion.

Competence alternatives

The possible tasks of independent budget institutions may be divided into two main groups: positive and normative tasks.
CONGRESSIONAL BUDGET OFFICE

The U.S. budgeting system is based on the balance between the legislative and the executive power at a decisive rate. Nowhere in the world has the legislation such great a power as in the United States. The institutional guarantees of the traditionally existing balance of power between the president and the Congress were motivated by President Nixon’s abuse of power in the early ’70s.

As a result of budget reforms implemented in 1974, the president has been obliged to submit his/her budget proposal to the Congress each year, but the Congress is able to create a full budget on its own. Practice has indicated that sometimes the Congress hardly scans the president’s proposal, immediately starting to work on its own version. The Congressional Budget Office (hereon referred to as CBO), the most important institution of the congressional process, was established within the framework of the aforementioned reform. The CBO is a nonpartisan and well-informed organisation, which fulfils a number of important tasks in respect of the budget, including:

- regularly calculating base-line projections for a 10-year horizon, based on current legislation and macro-economic forecasts. The basis for the parameters required for a macro-path projection (GDP growth, inflation, interest rates, etc.) is provided by the average of the projections made by the best independent forecasting institutions. These averages are modified by the CBO slightly, partly because merely making averages may result in a mathematically inconsistent macro-path, and partly because this represents the independence of the institution;
- “re-pricing” the president’s budget proposal each year based on its own macro-economic forecasts and technical projections, actually calculating real budget impacts of proposed decisions on a ten-year horizon, continuously informing the Congress of how earlier targets (the deficit predominantly) are developing during the budget debate;
- calculating the budget impacts of each congressional bill or amendment proposal (including amendment proposals for the budget bills), which has been found by at least one congressional committee suitable for debate;
- calculating the expected impacts of bills in respect of the federal budget, the sub-national governments (federal states and local municipalities) and also for the private sector. This role is particularly important in the case of bills whose impacts are not evident at first sight. Even though these calculations do not play an eminent role in congressional debates, they have in recent decades influenced the mindset of congressmen and congresswomen in tabling their proposals;
- preparing economic forecasts (the impacts ageing, for example) for a very long horizon (spanning as long as 125 years with 50 years in retrospect and 75 years ahead);
- scrutinising actual issues, tabling decision alternatives—of course, upon request by any committee or member of the Congress without any political assessment;
- preparing news bulletins for the Congress of current economic situation and processes.

In the course of decades, a rivalling cooperation has evolved between the CBO and the Office of Management and Budget (the presidential budget office). Initially, there were huge discrepancies, ranging between 20 and 30 per cent, between the forecasts of the two institutions. By now, however, the gap has narrowed to less than one per cent. Many from the staff of both institutions have worked at both organisations, and they are proud of it. OMB expert find support against political pressure in the fact that the government will find itself in a very unpleasant situation (bordering on ridicule) if OMB predictions deviates too much from CBO’s forecasts.

Positive tasks include:
- maintaining a public database,
- preparing macro-economic forecasts,
- preparing base-line projections,
- assessing calculation methods,
- preparing budget impact analyses, including

* verification of the substantiation of the entire budget proposal,
* impact studies on amendment proposals during budget debates,
* impact studies for each parliamentary proposal (bills and amendment proposals).
Borderline cases:
• analysing the expected impacts of party programmes,[23]
• drawing attention to problems by preparing projections for very long terms.
Normative tasks:
• elaborating economic policy alternatives,
• making recommendations for economic policy measures.
Obviously, the more a budget office is engaged in normative tasks and the more it is reduced to merely issuing recommendations, the more likely political parties will attempt to influence its activities by political pressure. Accordingly, the PBO of the current practice in Hungary shall decidedly avoid normative tasks (including, for the time being, borderline cases as well), but shall exercise its delegated powers in the positive tasks in as wide a scope as possible.
The weight of PBO could be based on the power of publicity when the assessments and opinions of PBO bear no direct consequences (such is the case with Hungary's SAO), but opinions can be given legal status, as in the United States for example, where the CBO's estimates are usually used automatically in budget debates by the Congress when the figures differ from the numbers contained in the president's proposal. The Dutch government is obliged to apply CPB's macro-economic forecasts, and the Belgian government has to state the reasons for deviating from FPB's macro-economic forecasts. In the current Hungarian environment two solutions are conceivable:
If SAO/PBO continues to not produce its own alternative calculations, it could be prescribed by the House Rules that budget bills submitted by the government cannot be debated as long as the SAO reports find any of the forecasts for mandatory items insufficiently substantiated.[24]
If SAO/PBO does produce alternative calculations, these could be submitted automatically by the budget committee as amendment proposals, and the Parliament could decide between the government's calculations and those made by SAO (who was right will be seen when final accounts are made).
Evidently, PBO does not replace independent market analysts but supplements them. Market players have the advantage of being privy to market information, but PBO can access information from within the state. PBO may safely use market analysts’ predictions on macro-path and financial indicators (prime rate, exchange rates), and market analysts could rely on PBO's superior analytic capacity in processing and assessing budget data.

Alternative organisational structure
An independent budget office could, theoretically, be set up in a number of organisational forms.
A separate directorate and office could be established within SAO, which would fulfil the tasks of PBO without the authority to conduct subsequent assessment of the budget. As an advantage, this solution would utilise SAO's existing credibility capital and would not require extensive amendments in terms of legislation. Some say, however, that this design has a disadvantage in that it would cause a conflict of interests within SAO, because both ex ante and ex post control would be conducted by the very same organisation.
It is the same organisation indeed, but the features of these two control types differ, since ex ante control requires competence in economics, whereas for ex post control legal knowledge and approach is needed. Accordingly, should SAO pledge the extended tasks of ex ante control, it is very likely that it will have to scale up its capacity (which, of course, does not represent as high a relative extra cost as though a brand new organisation would be created). Given the fact that a sufficient number of experts with appropriate expertise for this task are not available in
Hungary at the moment, it would be prudent to expand the scope of tasks gradually. Obviously, the purest solution would be to establish a new organisation under the Parliament's control, but a significant disadvantage would be the fact that the new organisation would take several years at best (and some battles won) to prove its professional credibility and independence from political parties, which are essential to accomplish its objectives and mission as described initially. If internal conflicts of interest prove to be more severe after a few years' time than predicted and therefore warrant the establishment of a new organisation, it is still a lesser problem in our view than an initial lack of public confidence in the organisation's politically unbiased approach.

Finally, it should be mentioned that some experts believe a body consisting of independent experts—a budget council, not unlike the Convergence Council which operated in Hungary in the summer of 2006—should be set up. The council could consult other experts informally, but would not operate a large staff. The practice in Germany could be mentioned, where the “Five Wise Men” release their report and forecast of the economic development each year. This design has the advantage of being communicated well, and a wide scope of voters could see “credible faces”. This could absolutely not be the solution in Hungary's current situation because all that a small number of experts could do is examine macroeconomic projections because a more detailed scrutiny of the budget would require much larger staff. The United States Congressional Budget Office operates with a staff of more than 200, out of whom 30 work on macro-economic analyses, 18 on taxation, 76 on budget expenditures, 21 on micro-economic analyses, 31 on issues of healthcare and human capital, and 17 on defence spending. Subordinated to the six-strong management, a staff of 35 provide back-office services, such as preparation of publications, IT, etc. Most of the latter could be spared if the Hungarian PBO were to be established within SAO. Taking CBO as an example, the staff of even a penny-pincher Hungarian version would count closer to a hundred than to fifty.

Summarising the above, we believe that an office, to be headed by a separate vice chairman, could be established within SAO, which would expand its activities gradually, first with a low staffing (to be increased later), and would, if possible and needed, go independent in a few years' time. This gradual progress is in line with the assumption that it will take time to develop the required two expert communities (one at the Ministry of Finance and the other at PBO), but it is our assumption that a rivalling co-operation to develop between the two institutions would speed up the process.

FISCAL POLICY RULES

Fiscal policy rules that restrict budgeting are in place in a large number of countries across the globe, but the majority of these rules (including the golden rule) are historical heritage in a sense. In the early 1990s, the need arose that the fiscal rules to be implemented should comply with some kind of theoretical expectations. Regarding international literature, Anderson and Minarik (2006), as well as Kopits (eds.) (2004) address these issues. In Hungarian, Antal (2004) discussed the matters related to sustainable fiscal policy, particularly the convergence processes of the new members of the European Union.

Possible reasons for fiscal policy rules

**Budget impacts of ageing**

In the majority of developed countries the average age of the population and the dependency ratio have grown constantly. As a result, budget expenditures related to ageing (pen-
sions, healthcare, and long-term care) will grow substantially in the next twenty to forty years compared to their current level. According to current estimates, Hungary’s gross excess spending for this purpose will amount to 6 to 7 per cent of GDP by 2050, but will even be 3 percentage points higher even as early as 2030.

Therefore, reforming the country’s pension and healthcare system is unavoidable; however, the pressure can be reduced considerably by decreasing the weight of certain other expenditures. Most prominent among them is interest expenditures which—by definition—is the product of debt rate and its implicit interest rate. By reducing the debt rate and the risk premium incorporated in interest rates, budget expenditures could be cut back by percentage points.25

Reducing interest expenditures may be interpreted as pre-savings. In order not to have to increase taxes in line with growing pressure on the budget originating from the ageing of the society (which would perhaps reduce workforce supply which would be at a low level anyway), the assets whose yields will cover extra expenditures would have to be accumulated now. Since the Hungarian state has a huge amount of public debt, one of the convenient ways of asset accumulation is to reduce debt.

**Intergenerational equality**

The budget redistributes incomes, not only among various income groups, geographical regions, and industries, but among generations. Typically, generations in inactive age groups will receive net transfers from the central budget, while active age groups are net donors. If, as a result of a set of rules effective at a given moment, inactive age groups are given a higher average of net transfers than the average paid to the budget by active age groups, then the budget has to increase its debts. In this case it may be said that it burdens this disequilibrium on future generations because they will have to repay these accumulated debts.26

According to one possible interpretation of historical fairness27, no generation has the right to force later generations into any worse situation than his own. If economic activities have a positive net yield in the long term28, in other words the concept of economic growth is a reality, then each generation has the right to realise this yield in their own savings, thus demanding a little higher net transfer on the whole than the total they paid to the budget when they were in the active age group.

It’s not obvious whether there exists a positive real yield that could be guaranteed on an infinite time scale. Therefore, as a conservative estimate, it is estimated that no generation has the right to bequeath debt to future generations unless granting them assets of identical value that produce yields. Unfortunately, the system of national accounts, applied almost exclusively, never accounts for the exhaustion of non-renewable natural resources, thus it is very likely that the growth rate expected for an extremely long term will fall short of a statistically demonstrated potential expansion rate of one to two per cent.29

The question remains: What will happen to debts that have been accumulated in spite of the above principle? Obviously, the next generation cannot be expected to pay them back alone, because it will unfairly put them in an adverse situation. On the basis of historical fairness, these burdens can be distributed among an infinite number of future generations, which means that each generation will have to pay back an infinitely small ratio. This solution is only ensured if none of the future generations accumulates further net debt.

In this respect, special attention is to be directed to the golden rule, which states that the reason for a budget deficit can be nothing but investment expenditures. At first glance, this is equivalent to the condition that a growing debt should be offset by an increase in the portfolio of yield-producing assets, but unfor-
Unfortunately the situation is not as simple as that. A significant practical problem is that the majority of the government’s fixed investments cannot be proven to produce substantially higher overall yields (calculated at current prices) that would exceed the historic costs of such investments; and hence they should in fact be accounted as consumption. However, it seems likely that the ratio of return on expenditures spent on human capital investments and R&D is substantially higher, but statistics (on which the golden rule is usually based in practice) account them not as investment expenditures but as current spending. Currently, there are no official and well-defined indicators for investment expenditures, as regarded from an economic aspect according to which investments in fact increase the value of future consumption opportunities at an extent higher than the historic cost of the investment itself.

Avoiding socially expensive financial crises
According to international experience, the typical time for strengthening a system of fiscal institutions is the year subsequent to the first major adjustment measures after a serious crisis, because institutional solutions by themselves cannot save the budget, but, when appropriate political will is mustered\(^\text{35}\), could contribute greatly to retain the results of the accomplished stabilisation and to prevent the crisis-which would cause substantial economic and social costs-from recurring. For example, this path was taken by New Zealand in the mid-1980s, and also by Sweden and Canada in the middle of the 1990s. To date, there have been very few historical examples of a country reforming its own budget regime and implementing fiscal rules of its own accord, without any internal crises or external legal pressure, as if voluntarily. One of the few examples is Chile where-seeing the crises of neighbouring South-American countries-a rule for the cyclically adjusted primary balance was introduced in 1998 as a preventive measure. This example should be followed, because learning lessons from a crisis is a very expensive process. Estimates given by international literature differ widely, but calculations made by Barro (2001) indicate that financial crises reduce the economic growth of involved countries by 2 percentage points on average for five years. Accordingly, it may be said that five years after the crisis the GDP of these countries will be 16 per cent less than without crisis. Translated into Hungary’s case, this would mean more than HUF 3,500 billion.

**Monetary union**
In a monetary union it is necessary to restrict fiscal policies that remain under national control, as it would be beneficial for individual member states to opt for a strategy of succumbing to deficit-making at the expense of the others. The most obvious connection between national budget policies of a monetary union is represented by interest expenditures originating from public debt. Should one of the countries turn undisciplined, interest rates will rise in financial markets, because the “no bail-out” threat vis-à-vis the other freeriders is seldom credible. The Maastricht rules have been in force in the European Union since 1992, designed to manage such problems (and the Stability and Growth Pact of 1997 has even fortified its system of institutions). However, recently it has become evident that in a significant part of the member states ownership of the rules controlled by the central institutions of the EU is lacking both among politicians and the general public, and most members states are willing to violate them openly or surreptitiously if they feel their interests make such an action acceptable or necessary. Therefore, the European Commission has in recent years increasingly encouraged member states to strengthen their fiscal rules and institutions within their national competence.
Increasing transparency

Fiscal policy rules that are binding only ex ante may be considered rules that ensure transparency, because, when being violated, they signal, as an early warning system, that the budget policy has taken a turn in the wrong direction. One of the examples is the public debt ratio employed in the EU, which cannot exceed 60 per cent of the GDP of a member state in accordance with the Maastricht Treaty. The sixty-percent value itself bears no particular significance from the aspect of economics, but when this limitation is regarded as an indicator of a government’s budget policy performance (provided the debt ratio has started from a lower level), then the violation of this rule is equivalent to a confession by the government of not being able to fully control the situation and that processes are not headed in the right direction. If the general public is sensitive to this kind of information (because of not wanting to face another serious crisis again), political decision-makers will do their best to observe the rule even when no legal sanctions are imposed. This concept naturally leads to the conclusion that fiscal rules are to be created in a way that does not facilitate institutional arbitrage, in other words it allows no creative accounting and doctoring (or just a little and involving some very hard work at that).

The proposed system of fiscal policy rules

The essence of the proposed system of budget fiscal rules is that the Parliament shall record increasingly accurate details each year as the budget year draws to a close, which details will then have to be observed in budgeting. Four years prior to budgeting, the Parliament can see what is to be expected with no policy changes. Three years prior, it records the primary balance target, and two years before budgeting the upper limit of the net value of discretionary expenditures is set. And in the year preceding the budgeting process, all the budget bill debate will be about is the detailed allocation of free items. The value of the primary balance to be targeted is recommended to be derived from the formal fis-

Figure 1

**POSSIBLE DEVELOPMENT OF PRIMARY BALANCE**

![Graph](image-url)

- Primary surplus target
- Fiscal expansion (HUF billion)
- Actual primary balance
- Fiscal expansion (percentage of GDP, right scale)
cal rule which says that the real value of the government debt cannot increase; however, this rule is binding in the planning phase only. For the purpose of demonstration, a chart was prepared to show how the primary balance would have developed in the past ten years if this rule had been in force (See Figure 1).

In the course of implementation, nothing but discretional spending caps are legally binding, for they are the only scope that ensures real control and accountability. The basic logic behind the operation of the system is as follows:

1. Debt rule: Fiscal plans must not imply any increase in the real stock of public debt31 (in the medium and long term).

2. Based on the debt rule above-and taking medium-term macro-economic (primarily inflation-oriented) forecasts into account-the path of the nominal value of public debt may be defined three years in advance.

3. Based on the path of nominal debt-and taking medium-term macro-economic forecasts (related primarily to the development of interest rates) into account-the balance of interest revenues and expenditures may be defined three years in advance.

4. Primary balance targeting: The target value of the primary balance is created on the basis of estimates for nominal public debt and net interest expenditures.

5. Based on the macro-economic path, a forecast for the balance of mandatory items is developed. If the Parliament does not reach new decisions in the future that would affect the balance of mandatory items, the expected path of discretional items would be developing on the basis of the debt rule. If the Parliament or the government decides that the room of manoeuvring available to either of them is inappropriate (believing it to be too narrow, for example), then the Parliament shall-upon recommendation by the cabinet-decide how to adjust these two sub-balances.

6. Based on the Parliament's decision, the government will elaborate proposals and reach decisions (reforms) which ensure that the balance of mandatory items, as expected by the Parliament's decision, are met. Subsequently, neither the Parliament nor the government can make a decision to alter the balance of mandatory items.

7. Net discretional expenditure ceiling: After the Parliament has reached the decision of what balance of mandatory items is to be targeted, the discretional balance, as based on the debt rule, shall be set forth in the law. The government shall adhere to it by all means, as this will provide the basis of accountability when the final accounts have been made.

8. The government will submit the budget bill for the year \( t+1 \) in the autumn, which will have to address only the expected balance of discretionals as defined in the autumn of year \( t-1 \) and also the items inherited from previous years. The difference between the two shall represent the balance of voting items, or the manoeuvring space in other words.

9. In the final accounts adherence to the directives related to the balance of discretionals shall be scrutinised, as well as the reasons why the balance of mandatory items developed the way they did.

10. Should the public debt overshoot the limit set by the targeted path, there are three years available for correction. This condition could be secured by making the primary balance requirement aligned not only with the stock of debt of the previous year but with the condition that the real value of the debt cannot exceed the level recorded four years earlier.

Providing more detailed time frames and explanatory notes, the timetable is contained in the Appendix along with the logic design of how the fiscal policy rules work.

An important problem from the aspect of operating the rule in practice is that the GDP deflator—which defines the target value of the
primary budget balance through the implicit interest rate of the public debt—cannot be measured or predicted accurately or timely. Therefore, some kind of a proximate price index is to be selected. The most convenient design is the Harmonised Index of Consumer Prices used by the European Union, but it should be noted that it differs from the deflator at several significant points. Firstly, it includes the effects of changes in consumer price subsidies—which, however, does not impact the GDP deflator. And one of the most important trends in transitional economies of Central and Eastern Europe is to cut back these subsidies gradually, as a result of which the measured rate of inflation has increased by one percentage point on average in the past 16 years. Secondly, it does not include any price rise of usage of owner-occupied dwellings, regarded as imputed personal consumption; and, thirdly, it does not account any price increase in other GDP components outside the scope of personal consumption (primarily public consumption, investments, and net exports). It is the latter items that cause great uncertainties and delays in measuring the GDP deflator. A solution may be the requirement of using a value 0.5 per cent lower than the market estimate on the harmonised consumer price index when the budget is being planned. This, on the one hand, would facilitate cautious planning in respect of some inflation-dependant items (VAT mostly), and, on the other hand, would mean an approximation to the GDP deflator from the aspect of the fiscal rule.

All this would be applied to the central budget, as well as the budget of separated government funds and social security, whereas a golden rule more stringent than the presently applied one should be implemented for municipalities, stipulating an equilibrium between their current revenues and expenditures, which means their total deficit cannot exceed their gross investment expenditures (their fixed-asset investments predominantly). A relatively simple way of practical implementation of this rule would be to restrict municipalities to use medium- and long-term loans to finance investments only. The portfolio of short-term loans taken out for liquidity management purposes should be limited in terms of their own income, because funds from the central budget to finance current spending will be transferred, by definition, in line with task schedules.

To choose between various systems of rules, it should be scrutinised what impacts they have on the significant economic variables under different conditions. The problem is somewhat analogous to the dilemma one faces when browsing the test results of various models before buying a car. There is a more or less established system for vehicle testing (including acceleration, braking distance, fuel consumption, frontal crash, low-speed crash, the “reindeer test”, probability of malfunction, etc), but to our knowledge no such test criteria exist for fiscal rules. A “test course” of “driving situations” is discussed in the Appendix, which in our view provides an appropriate scrutiny into whether or not a given fiscal rule can be applied in Hungary’s current situation.

**PROCEDURAL RULES**

Of procedural rules addressed in international literature, the country analyses made by von Hagen (1992) and Gleich (2003), as well as by OECD’s periodical *Journal on Budgeting* should be underlined primarily.

Some possible reasons for procedural rules

**Conscious shaping of budget structure**

Wierts (2005) scrutinised structural changes in the budgets of EU member states between
1998 and 2003. In the years around the euro introduction of 1999, the debt service expenditures of most member countries decreased in terms of GDP, because the risk premiums of interest rates gradually vanished in terms of the common currency, re-pricing public debts gradually (with respect to longer-term bonds). Savings facilitated by some member states (Greece, for example) were close to 10 per cent of their respective GDPs, but the others also recorded figures around 5 per cent. The question arises: What did they use their increased room of manoeuvring for? Experience indicates that member states operating sophisticated systems of budget institutions used part of the savings to reduce their deficits, spending the rest on future-oriented, growth-enhancing expenditures (such as investment, R&D, etc.). In countries that were less developed in this sense most of the savings was consumed by an increase in social transfers. This example illustrates the concept especially well that an appropriate system of fiscal institutions is important not only for the short-term control over deficit but it is essential to shape the budget structure relevant to long-term sustainability in a well-considered way.

According to international experience, one of the typical problems is that fiscal adjustments are procrastinated until there is very little time left to avoid a crisis, thus expenditure items that can be reduced easily and quickly will fall victim first. Among them future-oriented expenditures, probably because they are in nobody's vested interest. Making a general trend, various interest groups strive to have their budget allowances legislated as mandatory items, making it hard or even impossible to reclaim these items from them in times of adjustments. It is to be expected of a good system of procedural rules to safeguard the quality of the budget and prevent mandatory items from proliferating.

“Breathing technique”
According to one of the most important findings of the Pèbereau Report on the analysis of the dire situation of the French budget in 2005, a general practice had emerged in France in the past decades where the government was expected to resolve each and every significant economic and social problem, with the most typical, and sometimes the only, method being the budget’s readiness to give money—often fast and without any efficiency considerations. It seems this phenomenon is not entirely alien to the Hungarian practice, either. Given the fact that problems will always exist—and always the current problems will seem to be the most significant—the only way to respect fiscal constraints is to install appropriate procedural rules to curb overly careless and irresponsible increase of budget expenditures. The phenomenon is somewhat similar to the situation of a long-distance runner: The body always needs large amounts of oxygen, but it almost certainly leads to failure when the runner gasps for air haphazardly, instead of taking controlled breaths.

Ex ante credibility

External credibility
The issue of credibility, as one of the most important reasons for implementing rules that ensure transparency, has been addressed above, but there it was only said that economic players, especially investors, want to be as certain as possible that no information relevant to their positions is hidden from them. Procedural rules help credibility by decreasing the negative ramifications of collective decision-making and time inconsistencies. Risks are reduced substantially if the government and the Parliament tie their hands in advance by procedural rules as well. Not only has the government to pursue a disciplined budget policy, but also has to convince financial markets in advance, otherwise a deficit reduction due to risk premiums will not
happen, increasing the social costs of the adjustments.

**Internal credibility**

Situations where the implementation of the budget needs adjustments within the fiscal year should be avoided as much as possible, because in practice this almost always means across-the-board cutbacks on expenditures that can legally be reduced (multi-annual investments, for example). Across-the-board cutbacks destroy the government’s internal credibility because even disciplined entities are penalised. To avoid the necessity of implementing interim adjustments, an appropriate system of reserves should be installed in the planning system which has been assessed *ex ante* by the professionally accepted and independent expert institution. When the budget policy lacks credibility and it is foreseen that adjustment will be needed with time, then this prophecy will almost certainly fulfil itself, because fears of adjustments trigger a strong urge for fast overspending.

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**BLOCKING APPROPRIATIONS WITHIN THE FISCAL YEAR: REASONS AND METHODS TO AVOID THIS PRACTICE**

Blocking appropriations within the fiscal year has in recent years become regular in Hungary. The practice of across-the-board cutbacks ruins the government’s internal credibility, because blocked items that are supposed to offset faulty planning (due to lack of information, carelessness, or wilful wrongdoing, for example), will damage ministries and institutions that have had nothing to do with arising mistakes or a deficit overrun in a universal manner. As a consequence, some ministries and institutions cease to be interested in a disciplined, savings-oriented approach, and the urge even intensifies to create reserves (superfluous activities and institutions) which can be sacrificed without having to endure large losses when the cutbacks emerge “on time, as expected”. The proliferation of reserves (with deficit targets “carved in stone”) will of course just put additional tension on the budget and increase the necessity of cutbacks. As an additional adverse effect, interventions within the fiscal year necessarily distort the budget structure, because, on the one hand, there is not enough time and information to develop an optimum action plan, and on the other hand, a large number of expenditure items (which “deserve” to be reduced) are inflexible in the short term because of civil law agreements clinched earlier. All these provide foundation for the expectation that interventions within the fiscal year should never be necessary in a well-operated system.

In order to establish this principle as a general rule, let’s take a look at some of the cases when the necessity of intervention within the fiscal year may arise at all, and what phenomena could cause budget figures for the current fiscal year to deviate from targets:

1. noise (for example, a large amount slips over to the next budget period; litigations have unexpected outcomes; weather; etc.),
2. changes in seasonality (due to legal modification of in-payment deadlines, for example),
3. unexpected events in the business cycle,
4. structural breaks in trends,
5. wrong forecasting model,
6. wilfully wrong planning.

In cases 1 and 2, economic policy must not react at all. In case 3, the automatic stabilisers have to be allowed to do the job. If forecasting models are based on time series spanning several years, then in cases 4 and 5 at least one year is necessary to detect any breaks in the structure or any fault in the model, thus no reaction shall be made before the next budget. The only case when the action should not be delayed until the next budget is when planning was faulty from the start. The necessity of making a substantial adjustment within the fiscal year can only be excluded if and only if intentionally erroneous planning is precluded. Planning errors can be ruled out safely when the process is professional and transparent, meaning:

1. appropriate database and forecasting methodology are in place,
2. the database and the methodology are public, and can be assessed by the professional community.
Prevention is more efficient than penalties even in political decisions

In parliamentary democracies, elected politicians bear political responsibility for their political decision, where the main indicator of political responsibility is the chance of losing the election. Since elections are held every four years only, the outcome reflects the combined effects of a huge number of decisions, therefore an election result cannot be regarded as a direct consequence, or either a reward or a punishment for any specific political decision. There is no other way outside the elections to assess political decisions in a legally binding manner, nor there is a way to sanction political decisions or their consequences. If for some reason it is deemed important to avoid an excessive public debt, then it’s no use promising sanctions for such an event (because these threats in themselves are not too credible), but any chances of excessive debt should be excluded by installing appropriate procedural rules (the observation of which, however, is not classified as a political decision). If the cabinet and the governing parties are really sincere about budget discipline, then they will undertake these rules voluntarily, and it will not be in the interest of the opposition in the first place to inherit a debt-ridden country one day.

Increasing transparency

If political decisions cannot be sanctioned appropriately by legal measures and the shaping of the budget is necessarily a subject of political decision\(^{33}\), the only solution left is the transparent measurement and assessment of the extent to which promises have been kept. Through forming public opinion, this will lead to political consequences (voluntary resignation, for example). This requires that promises be quantified if possible, measured timely, and that their implementation should actually (and mostly) depend on the performance of decision-makers. Otherwise nothing is to be expected but never-ending political exchanges and the smearing of responsibilities that cannot be exposed objectively.

Recommended system of procedural rules

Budget cycle, decision competence

The procedure for setting various target values and limits have already been explained in the section addressing the recommended system for fiscal policy rules, thus it will not be repeated here. However, it should be noted that the Parliament’s explicit decision in respect to mandatory and discretionary items is supposed to help safeguard the quality of the budget.

One of the most important tools of retaining fiscal discipline is to give neither the government nor the MPs the chance to increase the deficit by submitting amendment proposals to either the Budget Act or other specialised law (in excess of the set of fiscal rules). Dubbed PAYGO rule\(^{34}\) by U.S. terminology, this rule has already been effective in the House Rules of the Hungarian Parliament\(^{35}\), but, surprisingly, there is a single exception from its applicability-none other than the first round of the budget bill debate.\(^{36}\)

In order to make the rule of restriction on deficit increase observed, the expected budget impacts of each bill and budget amendment proposal shall be calculated (estimated). In
order to make the various alternatives comparable, a common point of reference is needed, and this is exactly what the aforementioned base-line projections ensure. Therefore, it seems expedient to prepare base-line projections regularly, each quarter for example.

It is recommended that the Parliament should debate the budget bill and tax bills jointly in order to ensure consistent transfer of tax law amendments into budget forecasts. Following the first round of the debate when key figures are defined-and respecting the 45-day preparation period as stipulated by the law to be passed between announcing tax laws and putting them into force-the tax laws can be announced. Then, the second round of the debate starts, now concentrating purely on budget issues, with voting items being the only scope that may be changed within their individual chapters.

The schedule of preparing and addressing the final accounts is recommended to be modified. According to current practice, the government delivers the draft to the SAO by 30 June after the fiscal year, and then the Parliament will receive the final version at the end of August. It means that the SAO has roughly two months to check the draft. It is recommended instead that the first draft—which contains numeric data predominantly—should be prepared by the end of March but the Parliament should not start debating it before next spring. This setup would yield four benefits:

• the basic data could be used in next year’s budget planning as early as April;
• the SAO would be given substantially more time (about a year) to conduct the audit;
• explanation of the final accounts could analyse various factors that have impacted the budget; presently it cannot be done because macro-economic data for the preceding year released by the Hungarian Central Statistical Office are usually unavailable before August;
• documents of final accounts could be given much greater attention by the Parliament than today, as currently they are overshadowed by the budget debate in the autumn.

In the present system of the Hungarian budget (and legislation, in general) the finance minister and the Parliament’s Budget Committee have eminent roles in a relatively few aspects. It is to be considered that the Parliament should not address proposals (either bills or motions for amendment) that have been found by the budget committee unsuitable for debate. The finance minister’s role of making a preliminary screening would be advisable to be extended by the solution-already used in some areas, such as guarantees—that motions are to be submitted to the cabinet jointly by the finance minister and the minister of the relevant portfolio.

Content of budget documents

The legal part of the budget documents would comprise three basic accounting components:

1. detailed appropriations of voting items for the upcoming year,
2. mandatory lower limit for the balance of discretionary items for the second subsequent year,
3. required changes in the balance of mandatory items for the third year and subsequent years after the current years. (See also: Item 5 in sub-section Recommended system of budget policy rules above)

The explanatory part would comprise the following components:

1. macro forecast for the next three years,
2. forecast of all budget revenues and expenditures (including mandatory items) in the three subsequent years where the estimates for the third year are based on the assumption of no policy change.

Seemingly, there is a contradiction between the legal and the explanatory part, because esti-
mates for the third year in the explanatory part are made on the assumption of no policy change, which most likely does not comply with the requirement defined by the fiscal rule. The contradiction is only seeming because the Parliament has to decide how much of the gap should be eliminated by modifying mandatory items and how much by modifying discretionary items. When in the following year the government tables its proposals to the Parliament by which the balance of mandatory items will improve at the desired extent, the balance of discretionary items can be defined and aligned on the basis of the new current macro-forecast.

Reserves system; amending the Budget Act; supplementary budget

As it has been indicated above, appropriate reserves are to be built into the budget in order to eliminate any violation of budget policy rules as well as necessarily non-optimal interventions with as high a probability as possible. Since mandatory and discretionary items are both exposed to various risks, reserves need to be created on the basis of different principles. It is recommended by this study that the sustainability of the balance of mandatory items should be “cushioned” with conservative assumptions. One of the relevant examples is the solution applied in Canada between 1994 and 1998, which took market consensus as the basis for macro forecasts and transferred the impacts of an assumption along the entire path (growth, inflation, etc.) that interest rates would be one percentage point above the market consensus. As a technically easier solution, growth and inflation predictions can be directly modified in the direction unfavourable for the budget.38

In the scope of discretionary items the concept of general reserves should still be in place in order to cover really unexpected expenditures, but additional reserves are also conceivable. These could include special provisions (to manage in-process litigation), or equilibrium reserves, such as the system of equilibrium reserves for chapters in the Budget Act of 2007, perhaps with the addition to ensure the Parliament’s control over the utilisation of reserves (for example, the Parliament could define in advance what to spend the equilibrium reserve on if the deficit develops as planned).

To replace the current and inapplicable regulations of “amendments to the Budget Act” and the ”supplementary budget” the following two designs are recommended.

Amendments to the Budget Act:
• one-round procedure,
• no more than 5 discretionary items can be modified,
• updated macro-fiscal forecast is to be attached,
• applicable no more than twice a year,
• can be consolidated with the debate of other laws only if they directly relate to the items to be modified.

Supplementary budget:
• a procedure equivalent to the usual two-round address of the Budget Act,
• cannot be consolidated with other bills,
• updated macro-fiscal forecast is to be attached.

If it becomes clear during the year that the planning of some discretionary items have been faulty, a way shall be found to correct the mistake, but the sequestration should be avoided by all means. The recommendation of a compromise that no more than 5 discretionary items can be modified aims to achieve this objective.

SUMMARY

From every professional aspect, the situation in Hungary has matured to implement comprehensive reforms to ensure budget discipline and transparency. In a relatively short time frame, changes could be made that may serve
for decades as a suitable foundation to a sustainable fiscal policy. This study recommends that the transparency of the budget system be substantially improved first, and then, as technical conditions are being developed, fine-tuned and perfected continuously. Having secured the methodologies of data and forecasts and the credibility thereof, the opportunity arises to implement a very simple fiscal rule: The real value of government debt must not increase. The target value of the primary balance of the budget can be derived from this rule, and then, in turn, the expected balance of discretionary items—which the government could control in the short term as well—could be deduced. The latter should be subjected to accountability, because it allows personal/organisational responsibility to be established. Excessive debt accumulation by municipalities could be prevented by the golden rule; and in the case of state-owned corporations, the gross accounting of their earnings in the budget could make the efficiency of their finances transparent.

If and when policy-makers are willing to tie their own hands with rules that have proven worthwhile in other economies and to regard and manage credible information related to the operation, situation, outlooks and intentions of the state as data of public interest, then the private economy will reward the creation of a new and more predictable environment with intensified economic activity. The state too would profit from it.

APPENDIX

TESTING FISCAL POLICY RULES

Main requirements from a system of fiscal policy rules

Before choosing among different possible fiscal policy rules we have to define the theoretical and practical requirements that an optimum system has to meet. Unfortunately, these requirements are partly contradicting each other, hence there is no single optimum rule for all possible circumstances. This is a real choice, for which we consider the following incomplete list of aspects important in the current Hungarian situation: the optimum rule shall

- ensure long term sustainability
  - guarantee the reduction of the debt ratio over the next 20 to 40 years required by the expected increase in age-related expenditures
  - leave enough fiscal room of maneuvering for the subsequent governments and years
  - provide the mechanisms necessary to safeguard the quality of public finances
- support economic stabilization
  - let automatic stabilizers work
  - be compatible with an inflation-targeting or Taylor-rule based monetary policy regime
  - not enforce excessive reaction to temporary effects
- be robust
  - achieve its goal even if policy-makers always want to meet the minimum requirements
  - not use complex and arbitrary calculation methods (e.g. shall not be based on cyclically adjusted indicators)
  - not be subject to circumvention via creative fake solutions (e.g. institutional arbitrage, privatization, re-valuation, etc.)
  - stabilize the optimum long term path, i.e. economic policy shall be redirected to the original path when the rules are violated
- be politically feasible
  - be easily comprehensible, measurable and verifiable
• be compatible with EU-obligations such as the Stability and Growth Pact
• make every decision-maker liable for what they can sufficiently control
• leave enough time to prepare structural reforms when necessary
• not lead to unnecessary tightening, shall not disproportionately favour future generations

Mathematical formulation of the real debt rule

The rule, stating that the real value of public debt must not increase, can be defined in a mathematical formula as follows:

$$1 \frac{D_{t+1}}{1 + \pi_{t+1}} \leq D_t$$

where $D$ represents the stock of nominal debt, and $\Pi$ is the GDP deflator.

When the rule is observed accurately, the debt ratio will be decreasing subject to the growth rate of real GDP, because:

$$2 \frac{D_{t+1}}{Y_{t+1}} = \frac{D_t}{Y_t} \frac{1}{1 + \rho_{t+1} Y_{t+1}}$$

where $Y$ is the level of nominal GDP, and $\rho$ represents the growth rate of real GDP.

In absence of financial transactions and revaluation effects the change in the stock of nominal debt equals the total deficit. If the impact of interest expenditures is deducted from it, then there emerges a relatively simple approximate formula for the primary balance:

$$3 \frac{b_{t+1}}{Y_{t+1}} = \frac{iD_t - (D_{t+1} - D_t)}{Y_{t+1}} = \frac{iD_t - \pi_{t+1}D_t}{Y_{t+1}} \approx \frac{i}{1 + \pi_{t+1}} \left( 1 - \pi_{t+1} \right) Y_t = \frac{i}{1 + \pi_{t+1}} Y_t$$

where $b$ is the nominal value of the primary balance, $i$ represents the implicit nominal interest rate of public debt, and $r$ is the (ex ante) real interest rate thereof.

As another possible interpretation of the rule, the total deficit may not exceed the extent of inflation compensation paid on the public debt.

$$4 \frac{D_{t+1}}{Y_{t+1}} - \frac{\pi_{t+1}}{1 + \pi_{t+1}} \frac{D_t}{Y_t} \leq \frac{\pi_{t+1}}{1 + \pi_{t+1}} \frac{D_{t+1}}{Y_{t+1}}$$

Assuming in accordance with economic theory that holders of government bonds do not regard this part of the interest income as income because spending it would reduce the real value of their assets, then, obviously, this deficit cannot implicate any additional demand on aggregate level, or, in other words it cannot generate inflation. (Antal, 2004, page 219).

Comparison with alternative fiscal policy rules

Hereunder the recommended system will be compared with three frequently mentioned alternatives. The first of these is a strict interpretation of the “close-to-balance or in surplus” requirement for the fiscal policy set forth in the Stability and Growth Pact, which means that the total balance has to be in constant equilibrium, perhaps with minor cyclical fluctuations. The second one is again a strict interpretation, this time of the Maastricht criteria, which stipulates that the entire deficit cannot exceed 3 per cent of GDP and the debt ratio must not exceed the 60-percent threshold, also relative to GDP. Considering that the 60-percent debt ratio can be stabilised by the 3-percent GDP-related deficit only if the growth rate of nominal GDP reaches 5 per cent in the long term, but in line with current outlooks it is not to be expected in developed European countries, therefore, out of the two rules the one limiting the debt ratio would probably be effective in the long run. The third one is a primary balance rule, included in the Public
Finance Act as amended at the end of 2006, according to which the primary balance should record a surplus. In this study, the rule shall be described slightly more generally: the primary balance has to reach **κ** per cent of GDP. (See Table 1)

If the stringency of fiscal rules is measured on the basis of the required primary balance, it is obvious that the real debt rule is some kind of a midway solution between the strict interpretation of the Maastricht Treaty and the Stability and Growth Pact. The last column of the table indicates that all three rules define the required primary balance against a debt ratio, where the SGP-anchoring the nominal debt level-defines the nominal interest rate as the multiplier; the real debt rule sets the real interest rate as the multiplier; and the Maastricht debt ratio rule defines the multiplier as the difference between the real prime rate and the real growth rate. Anchoring the GDP-related primary balance is problematic for it is an unstable system, because in case of external impacts on the single equilibrium points the debt and the debt ratio both will increase or decrease to infinity (even into the negative territory).

**Operation of the system of rules with alternative scenarios**

**Long-term sustainability**

If excessive debt accumulation of municipalities is prevented by the golden rule and the earnings of state-owned corporations are included in the budget balance, as dictated by the gross accounting principle addressed above, then excessive debt of the governmental sector-as defined by the ESA’95 statistical methodology of the European Union-and an increase in the Maastricht debt ratio could be prevented by limiting the central government debt.

If there is no real growth-as perhaps presumed for the long run when external factors are taken into consideration-the debt ratio stabilises. If the growth is fast, the debt ratio will decrease quickly but will not disappear entirely, hence there should be no concerns over the liquidity of the government securities market (as it was repeatedly the case at the end of the 1990s when the public debt of the United States started dropping at a very brisk pace).

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### REQUIRED PRIMARY BALANCE

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Nominal debt formula</th>
<th>Debt/GDP ratio formula</th>
<th>Primary balance formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability and Growth Pact</td>
<td>$D_{t+1} = D_t$</td>
<td>$\frac{D_{t+1}}{Y_{t+1}} = \frac{1}{\rho + \pi} \frac{D_t}{Y_t}$</td>
<td>$\frac{b_{t+1}}{Y_{t+1}} = \rho \frac{D_t}{Y_t}$</td>
</tr>
<tr>
<td>Real debt anchor (recommended)</td>
<td>$D_{t+1} = (1 + \pi) D_t$</td>
<td>$\frac{D_{t+1}}{Y_{t+1}} = \frac{1}{\rho + \pi} \frac{D_t}{Y_t}$</td>
<td>$\frac{b_{t+1}}{Y_{t+1}} = \rho \frac{D_t}{Y_t}$</td>
</tr>
<tr>
<td>Maastricht Treaty</td>
<td>$D_{t+1} = (1 + \pi) (1 + \rho) D_t$</td>
<td>$\frac{D_{t+1}}{Y_{t+1}} = \frac{D_t}{Y_t}$</td>
<td>$\frac{b_{t+1}}{Y_{t+1}} = \rho \frac{D_t}{Y_t}$</td>
</tr>
<tr>
<td>Primary balance/GDP anchor</td>
<td>$D_{t+1} = (1 + \rho) D_t - \kappa Y_{t+1}$</td>
<td>$\frac{D_{t+1}}{Y_{t+1}} = \frac{1 + \rho}{1 + \rho + \pi} \kappa$</td>
<td>$\frac{b_{t+1}}{Y_{t+1}} = \kappa$</td>
</tr>
</tbody>
</table>
In a scenario with roughly an initial 70-per-cent debt ratio and a real growth rate of around 4 per cent, the debt ratio will drop by nearly 3 per cent annually, far steeper than the 0.5-percentage-point reduction required by the Stability and Growth Pact, but not as much as if the total balance would be around 0, as required again by the SGP as well. Should Hungary be able to maintain an average growth rate of around 4 per cent, the debt ratio would decrease to 47 per cent within ten years. And if the average rate of growth is 3 per cent in the subsequent ten years, then the debt ratio by the end of the 20th year will have dropped to 35 per cent, half of today’s ratio.

If Hungary’s growth within the European Union—the real convergence—is slower, the debt ratio will also decrease at a lesser pace. This could be interpreted as a concept where the current generation has no right to live off the benefits of a fast convergence to the EU alone, and where the real convergence creates the opportunity for Hungary to relatively quickly reduce the debt accumulated by previous generations.

An unexpectedly high inflation rate during the convergence process—because, for example, the Balassa-Samuelson effect is stronger—allows a higher nominal deficit, but this will not affect the declining path of the debt ratio because of a higher nominal GDP.

From two aspects it is important to underline that formula (2) describing the development of the debt ratio contains the rate of real growth, whereas the approximating formula (3) of primary balance calculates with a real interest rate.

One of the aspects: Following the euro adoption, the implicit interest rate of the Hungarian public debt will likely be identical to the government securities yield of the other euro economies, which in turn will probably induce a lower implicit real prime rate. As a result, the primary balance targeted in line with the debt rule will decrease. If Hungary enters the euro zone with a 60-percent debt ratio, then—with a 5-percent nominal interest rate for the euro and a 3-percent (!) Hungarian inflation (GDP deflator)—the target for the primary balance will be 1.2 per cent, and dropping gradually further as the debt ratio decreases.

The other aspect: When the fiscal rule is observed, the primary balance is subject to the real prime rate, and the debt ratio will depend on real growth. Both major trends are to be expected to emerge in the Hungarian economy in the decades to come, but ageing and a decelerating economic growth both will deteriorate the budget balance. There is an element of luck, though; a period of relatively fast growth is ahead for Hungary before the impacts of ageing kick in at full force. This period has to be utilised to get prepared. If the current debt ratio of around 70 per cent is maintained and in 30 year’s time the expansion drops to near zero, as predicted by a worse-case scenario, then a 1.4-percent primary balance with a real prime rate of around 2 percentage points will be able to prevent the debt from taking off. If, using this period of “pre-funding” prudently, the debt ratio is reduced to 35 per cent, then even a 0.7-percentage-point lower primary balance would be sufficient with unchanged conditions to maintain the budget policy in the long term (even infinitely). This means that a 0.7-percentage-point part from the burdens of ageing, indicated to be between 3 and 4 percentage points, will be offset by a decrease in interest expenditures. A similar advantage is not available to Italy and Belgium for example, because they have accumulated even higher debts and cannot expect to see a considerable extra growth in the decades to come.

**Economic stabilisation**

The required balance of discretionary items shall be fixed by the Parliament in the second year before the current fiscal year on the basis
of estimates of macro-economic indicators and
the derived balance of mandatory items for the
current year available at the time. When the
Parliament approves the budget in the autumn
of the (first) year preceding the current fiscal
year, expectations for macro-economic vari-
ables and mandatory items might differ largely
from the forecasts of one year previously, but
anchoring the balance of discretionary items is
important exactly because of the operation of
automatic stabilisers; the balance of mandatory
items may change—but strictly due to changes
in macro-economic variables, and not as a con-
sequence of additional parliamentary decisions.

Formula (3) gives a good reflection of an
appropriate coordination with monetary policy,
because fiscal policy also needs to become
more stringent as monetary policy gets tighter
(rising real prime rate), as measured by an
increase in the primary balance. If automatic
stabilisers are working in the budget, the price
shock will produce the necessary improvement
in the primary balance by itself (through
increasing VAT revenues, for example), with-
out government intervention.

If, in line with a Taylor rule, the central bank
makes a 0.5-percent hike in the expected prime
rate to compensate for a one-percentage-point
rise in inflation, then the primary balance
should improve by 0.3 percentage point with a
60-percent debt ratio. This will only happen
automatically, if the budget balance has an
inflation sensitivity of around 0.3. The weight
of directly inflation-sensitive items is far lower
than that in the current Hungarian budget, but
when the inflation sensitivity of private sector
wages is also taken into account, its impact
through tax revenues induces a considerable
stabilisation effect. It is therefore important
from this aspect that the parliament should
finalise the balance of mandatory items not one
but two years previously, so macro-economic
shifts in the year preceding the current year
could make their impact.

The higher the debt ratio, the more sensi-
tively the budget has to react to economic
cycles. A primary deficit can only be allowed if
the expected prime rate stays negative for an
appropriately long period of time (in other
words, a recession period of several years is
recognised by the monetary policy and the
equity market alike), or if the state assumes a
creditor position.

Should an unexpected price shock (fuelled
by oil prices, for example) hit the economy,
causing inflation to rise temporarily, monetary
policy will most likely get a little tighter (lest
the price increase affect expectations), which,
in turn, will cause expected nominal interest
rates to increase slightly. The implicit nominal
interest rate of the public debt will climb even
less, because longer bonds are re-priced gradu-
ally. Should the impact of the shock prove to be
long-lasting—and thus the central bank keeps
the prime rate high or even increases it—then
this will gradually transpire into an increase in
the required primary balance. Hence, the budg-
et need not respond immediately or drastically
(which would be especially imprudent when
the shock is indeed a temporary affair), nor
should concerns arise that the necessary adjust-
ments would be delayed till the end of time.

If growth makes an unexpected one-off
boost and reduces the debt even by one forint
more than planned, the required primary bal-
ance will decrease the very next year, allowing
the government to spend a little more, but the
yield of the surprise expansion is shared
between the current and all future generations.

Robustness and political reality
In the event that the debt exceeds the limit set
by the targeted path (it can be lower, but high-
er it must not be), the initial level should be
reverted to. It’s not a good thing if the rule can
be breached without any consequences and
even repercussions, even though a legal, ex post,
obligation is applicable to the balance of discre-
tionary items only (and perhaps to expenditure ceilings). Prudently, three years should always be available for correction when the debt requirement has been violated.

No full and immediate adjustment is to be prescribed, for it may lead to unconsidered and possibly unsustainable decisions. At the same time, the system should not be allowed to react too late to certain structural problems, interpreting the budget overshoot as a bad economic situation. As an additional advantage, the three-year time frame compels the very same government to right the mistakes that were made in the first year of its term (it’s not beneficial to top the predecessor’s apparent tab in the first year of the term).

Of course, as mentioned above, the core objective is to never break the rule, which goal could be secured more firmly by the system of budgeting reserves (see below). However, it is important to have a rule for the event when the rule is indeed broken, otherwise the chance of an ex lex state will destabilise the entire system.

As much as the objective is not to allow any chances for deviating from the path required by the rule without any “punishment”, so should it be avoided for the rule to prescribe an unreasonably stringent fiscal policy, for the ensuing political tension obviously could only lead to the “death” of the rule (either by de iure elimination or de facto disregard). Also avoidable is policymakers’ impression that the fiscal stringency of the present will finance years of lax fiscal policy in the future. Such a historical unfairness would indeed make the rule harder to be accepted by decision-makers of the present.

Since the proposed rule refers to the debt and not to some net asset category, the question arises: Can the rule be deceived by selling assets or by privatisation? In other words, can necessary measures be delayed? The debt rule cannot be sidestepped directly by planning revenues from selling stocks in state-owned corporations, because such an evasive action would require these revenues to be planned consciously three years ahead. The balance of discretionary items is impacted by the selling of tangible assets only (according to the current regulations), the selling of financial assets is not considered as revenues (in line with the methodology of the Maastricht deficit indicator). Planning a one-off revenue from asset sell-off is compliant with the PAYGO rule only if it offsets a one-off expenditure item. A problem arises only when the one-off expenditure item does not represent an increase in state assets, hence it is not an investment. In other words, the recommended system does not provide protection from the state’s intention to ensure funding-of one-off welfare payments, for example-by selling tangible assets that are in the realm of state-owned assets.
<table>
<thead>
<tr>
<th>Relative date (months)</th>
<th>Absolute date to year 2011</th>
<th>Work process</th>
<th>Content of the decision</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>t–44</td>
<td>30 June 2007</td>
<td>The government submits its macro-forecast and the predetermined items through t+12 to the PBO (Parliamentary Budget Office).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t–42</td>
<td>31 August 2007</td>
<td>The PBO submits its assessment on the macro-forecast and the predetermined items.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t–40</td>
<td>30 September 2007</td>
<td>Submission of a macro-fiscal baseline forecast to the Parliament. The government develops an action plan.</td>
<td></td>
<td>The Parliament faces potential problems for the year 2011 for the first time (Convergence Programme in November refers to the years 2008-2010).</td>
</tr>
<tr>
<td>t–32</td>
<td>30 June 2008</td>
<td>Submission of the macro-forecast and the predetermined items through t+24 to the PBO.</td>
<td></td>
<td>These forecasts already assume the Parliament’s approval for measures developed in the preceding 8 months.</td>
</tr>
<tr>
<td>t–30</td>
<td>31 August 2008</td>
<td>AThe PBO submits its assessment on the macro-forecast and predetermined items.</td>
<td></td>
<td>The PBO calculates an independent cost estimate of the action plan.</td>
</tr>
<tr>
<td>t–28</td>
<td>30 November 2008</td>
<td></td>
<td></td>
<td>The Convergence Programme for 2011 contains the government’s plans only, but already with approval from the PBO.</td>
</tr>
<tr>
<td>t–25</td>
<td>December 2008</td>
<td>The Parliament may order, in the form of a resolution, additional action plans from the government. The government develops additional measures. Based on the medium-term plan, the Parliament defines the minimum primary balance to be targeted for 2011 (in HUF billion, and not as a percentage relative to the GDP).</td>
<td></td>
<td>Even though exchange rate changes, privatisation or other financial transactions may impact the debt ratio to be expected for end-2010, these will not affect the primary balance target.</td>
</tr>
<tr>
<td>t–20</td>
<td>30 June 2009</td>
<td>Submission of the macro-forecast and the predetermined items through t+36 to the PBO.</td>
<td></td>
<td>These forecasts already assume the Parliament’s approval for measures developed in the preceding 5 months.</td>
</tr>
</tbody>
</table>
### BUDGET CYCLE (2)

<table>
<thead>
<tr>
<th>Decision of the content</th>
<th>Work process</th>
<th>Absolute date to year 2011</th>
<th>Relative date (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Parliament defines and fixes a minimum balance for discretionary items.</td>
<td>The PBO submits its assessment on the macro-forecasts and the determined items.</td>
<td>December 2009</td>
<td>f-13</td>
</tr>
<tr>
<td>The Parliament defines a minimum balance of mandatory items (in HUF billion, and not as a percentage relative to the GDP).</td>
<td>The government proposes a minimum balance of mandatory items for the following year.</td>
<td>30 September 2009</td>
<td>f-16</td>
</tr>
<tr>
<td>Negotiations between the line ministries and the Ministry of Finance.</td>
<td>Submission of the macro-forecast and of the predetermined items through t+48 to the PBO.</td>
<td>30 April 2010</td>
<td>f-8</td>
</tr>
<tr>
<td>Submission of the budget proposal to the Parliament.</td>
<td>Debate about the budget law and the tax laws jointly (round 1).</td>
<td>31 August 2010</td>
<td>f-4</td>
</tr>
<tr>
<td>Submission of the budget proposal to the Parliament.</td>
<td>Submission of the budget proposal to the Parliament.</td>
<td>30 September 2010</td>
<td>f-3</td>
</tr>
</tbody>
</table>

Comments:
- The explanation includes the forecast for the mandatory items as updated in line with the most recent macro-forecasts, and also contains the predetermined discretionary items.
- The laws may only be amended with zero net effect on the deficit (unless these measures come into force in later years).

The balance of discretionary items may be modified in either direction, also affecting the room for discretionary items, because the primary balance is already anchored.

The (yet undefined) balance of mandatory items cannot be deteriorated subsequently, but automatic stabilisers may work.

The government also prices the new action plans.

The PBO also prices the new action plans.

The balance of mandatory items would be derived from this and the target value of primary balance (defined earlier), but it cannot be fixed because macro-variables may change later.

These amendments can modify the balance of mandatory items, but their direction also affects the room for discretionary items, because the primary balance is already anchored.
### BUDGET CYCLE (3)

<table>
<thead>
<tr>
<th>Relative date (months)</th>
<th>Absolute date to year 2011</th>
<th>Work process</th>
<th>Decision of the content</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-2</td>
<td></td>
<td>The PBO submits its report on checking the calculations related to the voting items.</td>
<td></td>
<td>The costs of individual tasks need not be known in the first round of the debate, because the decision is about defining the total of major functions (e.g., health-care expenditures).</td>
</tr>
<tr>
<td>t-1.5</td>
<td>15 November 2010</td>
<td>Voting on aggregate figures, announcing tax laws</td>
<td>Anchoring aggregate figures</td>
<td>No subsequent re-allocation between chapters (“functions”) is allowed.</td>
</tr>
<tr>
<td>t</td>
<td>1 January 2011</td>
<td>Start of the fiscal year</td>
<td>Detailed budget</td>
<td></td>
</tr>
<tr>
<td>t+12</td>
<td>December 2011</td>
<td>End of the fiscal year</td>
<td>The final accounts are prepared by the Ministry of Finance</td>
<td></td>
</tr>
<tr>
<td>t+15</td>
<td>March 2012</td>
<td>The numeric part of the final accounts are received by the SAO.</td>
<td>The final accounts are audited by the SAO</td>
<td></td>
</tr>
<tr>
<td>t+27</td>
<td>March 2013</td>
<td>Submission of the final accounts to the Parliament.</td>
<td></td>
<td>The impact study as to the development of macro-economic factors is now included in the explanation.</td>
</tr>
</tbody>
</table>
Which of course is also a bit high considering the fact that the Convergence Programme does no calculate with a substantial output margin for 2010.

The analyst of the institution says what’s surprising is not the fact that there have been politicians in Hungary who have not spoken and written truthfully of the positions and outlooks of the central budget, but the way they have been allowed to do so for so many years. This fact alone is an evidence of serious problems regarding the transparency of the central budget system.

Accordingly, the euro adoption in Hungary or its date plays no role in this study.

Act XXIV. (IV. 25.) of 2003 on the amendments to various Acts regarding usage of public funds, the increase of publicity and transparency of and control over the usage of public assets.

What the premium prices predominantly is not the risk of default (for a country can never run out of its own currency, but it can wilfully refuse payment, like Russia did in 1998; and on the other hand the premium of Hungarian government securities denominated in foreign exchanges is no more than 20 to 40 basis points), but the risk of falling bond prices that occur on the back of currency depreciation at a larger extent and prime rate hikes at a smaller extent. The risk of non-payment is measured by the rate premium of forex-denominated government securities, which, however, is no more than half a per cent.

Unless the macro-path, serving as basis for the budget, or the derived estimates on VAT revenues are challenged, or an amendment to the VAT Act is submitted to increase VAT levels. None of these was the case on 23 November 2005 when the above amendment proposal (T/17700/932) was submitted by the Parliament's Budget Committee itself, and eventually approved by the Parliament. Of course, it was not the only reason why the VAT revenues of 2006, initially targeted to be HUF 1,791 billion, recorded HUF 1,831 billion only despite the 15-percent rate having been increased by 5 percentage points in September.

Theoretically, the Parliament could influence some of these items when an amendment is approved when the budget bill is being debated (for example, to modify the indexation of pensions), but it is assumed not to be, thus measures aiming to modify mandatory expenditures are to be submitted not later than the budget bill. Of course, civil law agreements already signed cannot be modified even in this design.

For example, the timetable of an investment to be implemented outdoors is subject to weather.

Before 2004, Pre-accession Economic Programmes – PEP

There are three material differences between the two accounting methods. The Hungarian presentation contains data only for public finance in a modified cash-flow approach, and accounts some transactions as revenues or expenditures, as the case may be, which represents the exchange of financial assets only. As a contrast, the methodology of ESA95 covers a somewhat wider scope of organisations, including some state-owned corporations and a number of NGOs as well, contains modified performance-oriented data and never accounts the exchange of financial assets.

It may be regarded as modified accrual-based approach because it accounts some items not in a performance-oriented but a cash-flow based approach. The most significant example is that investments instead of depreciation are accounted as expenditures.

It may be considered modified cash-flow because some items that do not actually generate a cash flow, such as return of accounts receivables, do influence the balance.

Of course, “budget corporates” is not a category in corporate law but in public finance only, which would represent enhancements to the presentation and ownership control. These corporations would continue operation in line with the Corporate Act, just like limited companies, limited liability companies, etc. do.

This is exactly the economic reason why these corporations are included in the ESA concept of the general governmental sector.

Based on this very consideration and upon recommendation by the State Audit Office of Hungary, the Budget Act of 2007 has transferred the authori-
sation for the two motorway companies to borrow to the jurisdiction of the cabinet.

16 According to information available, the Hungarian Central Statistical Office has been working on producing a time series of current revenues and expenditures of the government sector, but progress has been relatively slow due to capacity problems. Financial accounts of the government sector have been prepared and published by the National Bank of Hungary until 1991 in retrospect.

17 The European Union usually prescribes that convergence programmes to be submitted shall contain calculations as to the sensitivity of budget balance.

18 Articles 36 and 49 have been amended by Article 3 of Act LXV. of 2006.

19 Maintaining the real value at level presumes that, for example, the level of public services are not changing when the scope of service user is not changing, either. This approach would be a good reference point because it represents a mild incentive to reduce the level of budget expenditures in terms of GDP to the level of real GDP growth on the one hand, and to pursue a counter-cyclic budget policy on the other hand, provided that the approach of “greater boom means more spending” is disposed of.

20 Section (1), Article 18. Prior to creating a law, analysis shall be made, based on scientific results, in respect of the scope to be regulated as to the social and economic relations, the effectiveness of civic rights and obligations, the opportunities of dissolving conflicts in interests, and the expected impact of the regulations as well as the conditions of implementation thereof shall be scrutinised. Legislators shall be notified thereof.

21 Of course, what should be regarded here primarily is not the Budget Act but substantive laws which regularly introduce regulations whose expected impact on the budget is not known.

22 The concept of positive/normative is used in a sense of establishing facts and qualities as widely used in sciences.

23 In the Netherlands, for example, the Central Planning Bureau prices the election promises of the parties before each general election. Not that it is required by law to do so, but it has such a huge reputation that the general public does not consider a party a serious political force which does not request CPB voluntarily (!) to price its political programme.

24 Of course, this would necessitate to extend and modify the schedule of negotiations in a way that the government should be notified of SAO’s assessment before official tabling, as in the case of final accounts, to enable the cabinet to make modifications in the proposal accordingly.

25 If the debt ratio falls from its current level of around 70 per cent to half of it and the implicit interest rate drops from around 6 to 7 per cent to 4 to 5 per cent, the usual rate in the euro zone, then interest expenditures could be reduced from current 4.5 per cent in terms of GDP to 1.5 to 2 per cent. (Unfortunately, it is not evident that the current 4 to 5 per cent euro interest rates will be sustained in the long run).

26 The concept of disequilibrium used herein is simpler than the indicator applied in the theory of generational accounting, because it does not contain the current value of future annual deficits.

27 One of the most accepted approaches of the concept of social fairness says that because no one knows before his or her birth into which social stratum, what geographic location he or she will be born, a social redistribution system should be created which ensures the highest possible welfare in the largest possible number of life situations. As an analogy to this reasoning, we have no way of knowing in which era we will be born, therefore a redistribution system should be developed across generations that ensures equal chances for welfare in all historical eras. One of the implications of this reasoning is that each generation has the right to the same return on their savings.

28 Yield, of course, should be interpreted in the widest possible sense here, taking into consideration the combined changes in the value of human capital, fixed assets, natural resources, technological skills, net financial assets, etc.

29 Of course, the potential growth of 1 to 2 per cent refers to the period after the real convergence process in the EU.

30 For example, the Parliament passed a law (Article 1, Budget Act of 2004) in autumn 2003, upon recommendation from the government, that the
Maastricht deficit figure in the years 2004 to 2006 cannot exceed 3.8, 2.8, and 2.5 per cent of GDP, respectively. As a sharp contrast, the government submitted a budget bill in which the deficit planned for 2005 exceeded the legal maximum, still in force at the time, by 1.9 percentage points. In spite of this, the opposition made no address in the Parliament to demand the targeted deficit to be reduced to the legal level.

31 Pursuant to the definition of the Public Finance Act, the debts of municipalities are not included in the public debt.

32 The law currently restricts not municipalities’ debt portfolios or debt increase but their annual debt service expenditures, thus municipalities have the theoretic right to take on a payment obligation for perpetuity. The limit is subject to the total of corrected own income.

33 This study does not subscribe to the view that a body of nonpartisan experts, independent from political parties, should decide the desired level of budget deficit in an analogy to the fact that the short-term interest rate is decided by the Monetary Council of the central bank.

34 Pay As You Go, referring to the similarities between shopping and budgeting. When you buy something in a shop, you have to pay immediately; likewise, when budget expenditures are being approved, funding for them shall be dedicated immediately. The very same objective can be achieved without amending the House Rules: The budget statute may prescribe for the government to compensate for a balance deterioration caused by amendment proposals approved in the first round of the budget debate by employing cutbacks in voting items.


36 Section (4), Article 120 of same

37 Pursuant to current rules, an amendment proposal is suitable for plenary debate when supported by at least one-third of the members of at least one parliamentary committee who are present. In the case of a 12-strong committee, this means four votes, but two MPs (with four hands between them) are sufficient when they represent two others as well.

38 Unfortunately, it is to be expected in both cases that on the back of consistent implementation, credibility will again be jeopardised—this time in the opposite direction.

39 Of course, the Maastricht Treaty basically refers to sustainable fiscal policy and equilibrium, defining these values not as targets but as extremes. Experience of recent years, however, indicates (primarily in respect to applying sanctions) that a number of countries have in fact interpreted the criteria as targets.

40 This is analogous to the design applied by Sweden, Chile, and Brazil, where the primary balance is to indicate a surplus of 1 and 2 per cent, respectively. In Chile, the stipulation pertains to the primary balance as adjusted for cycles, but Brazil has not implemented this approach.

LITERATURE


The delay in accession to the euro zone makes the Hungarian economy vulnerable, thus the present state of public finance may be the source of serious problems. The prerequisite of accession is for the deficit measured with the European methodology to stay below 3 per cent of GDP, whereas the deficit in 2002 and in 2006 exceeded 9 per cent and fluctuated between 6–8 per cent in the interim period. Fluctuation is meant here literally since the Hungarian figures were modified systematically and rather substantially after the first publication of data. Beyond the high level of deficit, another at least as serious a problem lies in the significant role played by creative accounting and the (quasi-fiscal) circumventing of official accounting. This is partly in contradiction with the European statistical methodology and leads to a supplementary revision of data. But partly even this methodology makes “deferred payment” possible, for example, in the form of ex-post debt assumption or PPP repayment instalments. The alternative calculations of the central bank are also corrected with that, thus revealing that the actual deficit-to-GDP in 2002–2004 was permanently in the 8–9 per cent range, and thereafter it went beyond 9 per cent in 2005 and 10 per cent in 2006.

Masking the reality by gimmicks is only a symptom of what is usually referred to as deficit bias or the lack of social consensus. Real fiscal adjustment could also be implemented without a consensus by referring to the European fiscal framework which can be taken as mandatory, but in our case it appears to be a less credible argument in the light of the considerable deficit target overruns. In this situation fiscal institutions introduced at national level by which fiscal policy binds its own hands can be a solution.

Several proposals have been formulated in connection with the introduction of new fiscal institutions, and in 2006 the requirement of a fiscal balance rule and a balance reserve was incorporated in the Public Finance Act. The problem diagnosis and most proposals for solutions are similar, underlining, in general, the importance of transparency that restricts gimmicks (Bathó, 2006) or expressly mentioning it as a priority (Kopits, Romhányi, 2007). Concrete proposals have also been drafted to handle the gimmicks (P. Kiss et al., 2005).

Taking into account the specific Hungarian features, I shall make a proposal for fiscal institutions that are supported on three pillars and are complemented with three constraints.

The first pillar is the expenditure rule the circumvention of which is prevented by the first constraint through a broader coverage and definition of the category of expenditures.
The second pillar is the golden rule of local governments according to which indebtedness can grow only as a result of an imbalance between capital revenue and expenditure. This is where the second constraint comes in preventing central spending cuts from having a disproportionate impact on local government finances.

The third pillar is an independent organisation which enhances transparency with its forecasts and by adjusting with gimmicks and one-off items. The third constraint impedes deviation from the expenditure rule by generating a contingency reserve.

In the next pages, I shall demonstrate by numerical data that, if the deficit target is considered given, what level of tax increase would required or what level of tax reduction could be possible by selecting the growth rate of the expenditure rule. Finally, by overviewing the composition of expenditure, I shall examine to what extent the rate of the expenditure rule can be achieved without extraordinary efforts.

HUNGARIAN FEATURES

In many countries in the world there are fiscal institutions aimed at improving budgetary discipline and planning. This can be numerically defined fiscal rules or a fiscal organisations that contribute to the budget planning with independent forecasts. The experience of these countries can guide us in finding a rule and an organisation that could represent an effective solution in Hungary by eliminating the existing bottlenecks (or if you like, loopholes). The experience should however be treated with caution as the empirical evidence is ambiguous and concrete solutions play a dominant part in it. For instance, in the case of a balance rule no further improvement can be demonstrated after compliance with the rule. If the rules limiting the growth rate of expenditures were examined separately, then continuous improvement could be observed. Contrary to other rules, the expenditure rule makes it also possible for the fiscal policy to dampen the swings in the economic cycle since it imposes no constraint on the automatic stabilisers operating mainly on the revenue side.

The success of the fiscal institutions is largely dependent on how far the applied concrete solutions meet the requirements of the given country and provide answers to specific problems. A number of studies highlighted the deficiencies in transparency and the weaknesses in the planning, adoption and implementation of the budget in Hungary. The ultimate cause behind fiscal problems is to be found in the deficit bias rather than technical explanations similar to the one mentioned above. To this effect, not only technical changes are required but a constraint on fiscal policy should be introduced whose enforcement is assured by automatic corrective mechanisms and which rule cannot be changed by a simple legislative amendment. Owing to the usual circumvention of the rules, there is a need for stringent constraints to eliminate the existing loopholes since with the emergence of the deficit bias any rule will become ineffective at the weakest link.

The question is: which would be the most favourable out of the various fiscal institutions. With Hungary's EU accession the compliance with the EU-level deficit and debt rules has now become mandatory. Two kinds of weaknesses became apparent in connection with these rules. On the one hand, loopholes can be found around these rules for shorter or longer periods through quasi-fiscal and creative accounting operations. Let us refer, for example, to public investments carried out in the PPP-schemes. The upfront costs of these investments disappear from deficit and debt at the time of outsourcing from the traditional accounts, and thereafter repayment instalments appear with delay. The other problem is that
the developments falling outside the scope of fiscal policy (economic cycle, inflation, exchange rate) may to a large extent affect deficit and debt indicators. Since the impacts of fiscal policy and these exogenous factors cannot be separated in practice, the responsibility of fiscal policy is less evident. Furthermore, the Government can control only the central level of public finance, while having only an indirect effect on local governments. If – for example – a fiscal consolidation that would have decreased the expenditures of local governments fails, then it is not obvious who is responsible.

The three pillars of the fiscal institutions I am proposing introduce constraints in order to prevent from the circumvention of the expenditure rule, deviation from the expenditure rule and making the responsibility clear in case of other types of deviation (revenue, local governments). At the same time, this solution allows for the fiscal policy to reallocate within the growth limited by the expenditure rule as well as to modify the tax rates in a manner corresponding to the required deficit reduction. Besides, the local government sector would remain independent since they could carry on even in the future with the four-year investment cycles observed in the past.

The most urgent task would be to establish an independent organisation watching over transparency. Its function would be to make an assessment of the impact of exogenous factors, including the impact of fiscal policy measures on these factors. If this assessment resulted in the modification of budgetary projections in every case, then the systematic planning error could be avoided. The analysis to be done by this organisation would provide the basis for transparency by identifying the impacts of creative accounting, one-off measures and the economic cycles. An expenditure rule limiting the growth of all centrally controlled, expenditure-type items and items partly substituting them (tax expenditure, guarantees) would constitute a key pillar. A pillar of lesser significance is the imposition of the constraint of the golden rule-type on the local governments according to which the current balance must be balanced and only the imbalance between capital revenue and capital expenditure can increase the stock of liabilities. Its potential importance lies in the fact that it can limit the local governments’ incentives to finance investments via the PPP-scheme reflecting preferences for deferred payments.

THE FIRST PILLAR: EXPENDITURE RULE

As shown by international experience, the limitation of nominal expenditure growth can contribute simultaneously to reducing the deficit and to the operation of automatic stabilisers which moderates the effect of the cyclical swing (not allowing the utilisation of temporary revenue surpluses). The expenditure rule has another advantage, because it is less affected by exogenous factors than the deficit and debt rules. Accountability requires that expenditures uncontrolled by the Government should remain outside the scope of the rule, and thus it should not extend to local government expenditures, to the interest expenditures of the central government or to the compensation of loss by the central bank. The part that remains under the scope of the rule is the primary expenditure of the central government (hereinafter referred to as ‘primary budgetary expenditure’).

One of the disadvantages of the expenditure rule is that even if the deficit remains unchanged the transfers in cash can be substituted by granting tax expenditure. This can be eliminated by extending the scope of the rule to the tax expenditure. It is a smaller although not negligible problem in terms of evading the rule that the tax content of various expendi-
tasures is different and, as a result, the composition of the cuts in the expenditure side is also important in respect of the net impact on the deficit. Due to the shortfall in tax and contribution revenues, cutting public sector wages by a certain amount improves the deficit only half as much.

The main weakness of the expenditure, deficit and debt rules is that the quasi-fiscal expenditure and creative accounting make it possible to circumvent these rules. The cash-flow based accounting of the budget act is modified in compliance with the ESA statistical rules, thus quasi-fiscal expenditure and creative accounting is partly corrected. This would support the argument that the rule should rely on expenditures under the accrual recording of ESA-definition. This raises several problems. On the one hand, the statistical revisions are often done with delays; activities are “detected” only at the time of ex-post financing, for instance, in case of a guarantee is called or debt is assumed. On the other part, the financing of some activities emerges spread over a number of years, for instance, the instalment payment owing to implementing public investments under a PPP-scheme. Finally, there are a number of ways to convert cash-flow to accrual recording and this method may also change from year to year. It can be well illustrated by the story of the value added tax (VAT) where the recording of the postponed refund could not be corrected with the simple time adjusted cash method of accrual recording so the method had to be changed retrospectively.

If the expenditure rule is defined at the level of cash-flow expenditures specified in the Public Finance Act, it can make the rule simpler, more controllable and more suitable for timely intervention. Preventing the circumvention of the rule, however, makes another constraint necessary: a similar rule should apply for the five items that depend on the decisions of the Government and whose impacts are similar to budget expenditures. Accordingly, a growth limit corresponding to expenditures would apply separately to the aggregate expenditure of the Hungarian Privatisation and State Holding Company (ÁPV Rt), to the aggregate expenditure of the deposit account, to aggregate tax expenditure, to PPP investments and separately to the stocks of the different types of guarantees. Some guarantees supporting quasi-fiscal expenditures – e.g. the Hungarian State Railways (MÁV) – is very likely to be called. In the case of other quasi-fiscal subsidies – for example the preferential loans granted by the Hungarian Development Bank (MFB) – this is less likely to happen. It is can hardly be expected that the guarantees of Eximbank and the Hungarian Export Credit Insurance Pte Ltd. (MEHIB) will be called. This rule can also be evaded if companies involved in quasi-fiscal activity receive loans without state guarantee; therefore this possibility needs to be also limited.

Similarly to the expenditure rule applied in Sweden, it is advisable to limit the nominal growth of expenditures in Hungary. Its advantage is that it is simple and less easy to manipulate, and it dampens the fluctuation. It would be a difference from the Swedish system that it is not recommended to set the expenditure growth limit at the level of the individual budgetary chapters, ministries, consequently, the flexibility required for reallocations would be ensured by the stringent aggregate-level rule. The ceiling of the aggregate expenditure growth rate must be laid down in the Public Finance Act instead of the annual budget acts. Instead of the rolling three-year ceilings, it may be necessary to fix a lower growth rate until the year of euro-accession, and a higher but moderate rate in the following period.

According to the Swedish experience, a substantial reserve needs to be generated in order to ensure compliance with the growth ceiling. The stipulation of a contingency reserve is ne-
cessary to avoid overspending. Considering the repeated overspending in the past years, there is a need for a binding rule at the level of aggregate expenditure. This means that the flexible allocation of aggregate expenditure between years should be prohibited. One of the means to achieve that could be the partial or total deletion of the contingency reserve. Based on past experience, a contingency (balance) reserve of at least 1.5 per cent of GDP would be required. This means that the accumulation of reserve would correspond to 5 per cent of the total central budget expenditure. The contingency reserve thus established would replace the current general reserve and could include an earmarked reserve to cover the increase in public sector wages. The contingency (balance) reserve would be higher than the existing, but only 10 per cent could be utilised until 30 November to address real contingencies. The remainder of the contingency reserve would be automatically deleted, in part or in full, in December if in months 1–11 the open-ended expenditure items resting on normative regulation produce higher spending than time-proportionately expected. If the remaining part of the primary budgetary expenditure under stronger government control produces time-proportionately higher spending, then a public evaluation would be carried out of the developments. The State Audit Office (ÁSZ) would express an opinion on this evaluation, and then the Government would take a decision on the deletion or release of the contingency reserve. During the review in December the Government would also have the opportunity to delete a part of the contingency reserve in case of unfavourable revenue developments (I shall come back to the role of the independent forecast later).

While by introducing the first constraint I have made a proposal for broadening the category of primary expenditures, with the help of a second constraint I consider it necessary to make a further breakdown of the expenditures. This latter constraint would differentiate between expenditures based on whether they are transfers granted to local governments rather than whether they are of the mandatory or discretionary type. Mandatory expenditures are based on laws or international agreements. It is however not advisable to remove this expenditure of considerable magnitude from the scope of the rule since the enforcement of a stricter expenditure rule may trigger some legislative changes. At the same time, in order to avoid a disproportionate share of local governments in the adjustment, it is justified to separate the transfers to local government from the other primary budgetary expenditures and to supplement them with the transferred PIT-revenues. With the introduction of the second constraint the aggregate growth of the transfer together with the PIT should correspond to the growth ceiling prescribed at the level of the other primary budgetary expenditures, and thus local governments would contribute to the cut in general government expenditures in proportion to their transfers calculated together with PIT.

THE SECOND PILLAR: THE GOLDEN RULE OF LOCAL GOVERNMENTS

In Hungary, local government deficit was rarely sizeable. If the central government reduced their transfers in real terms, it was usually followed by an immediate drop in local government expenditures and only a smaller part (one-fifth) of it resulted in a higher local government deficit. (P. Kiss, 2007) To this effect, the second pillar ensuring the proportionate decrease of budgetary transfer would be sufficient without a need for another pillar, provided the possibility of a future greater indebtedness of local governments can be excluded.
Different methods are applied in the international practice to limit the local government deficit. A relatively relaxed regulation, which is stricter than the current one could be chosen to assure the independence of local governments. In the golden rule-type approach proposed by us the constraint to indebtedness represents that the current balance of local governments is to be well-balanced, whereas the imbalance between capital revenue and capital expenditure may increase the stock of liabilities. Beyond being theoretically well-founded, this solution has two practical advantages. First, it would ensure that the decrease in budgetary transfers moderated by the expenditure rule will not result in higher current deficit. Second, it would not stop even in the future local governments from continuing their four-year investment cycles or from providing their co-financing for EU-programmes.

Compared to the present constraint, it would imply that from now on the capital balance rather than adjusted own revenues will represent the ceiling of the debt-creating commitments of local governments (borrowing and related charges, as well as bond issues, guarantees issued, and leasing arrangements). This solution could stop the tendency that an increasing number of local government investments are financed through the PPP-scheme in the interest of short-term savings.

As regards the capital balance there is a need for its specific legal definition that is consistent with the methodology of the annual budget acts. The breakdown into cash-flow expenditures and revenues presented in the tables annexed to the annual budget acts is suitable for separating capital and current items. One should consider, however, that it is justified to exclude from the capital expenditures the VAT paid on investments. If this rule had been enforced between 1994 and 2005, then the annual local government deficit would have been lower by 0.1 per cent of GDP on average, and the local government share in the general government debt according to the Maastricht criterion would be zero today.

THE THIRD PILLAR: THE INDEPENDENT ORGANISATION

In Hungary, the general government deficit being significantly in excess of the planned level every year represented a critical fiscal problem. This was attributable to both planning mistakes and deliberate decisions. The scope of deliberate decisions can be regulated by a fiscal rule, whereas mistakes owing to biased planning can be eliminated under a new institution framework. In 2005, an IMF evaluation recommended to Italy that a similar organisation, under the name of fiscal council, should be set up to eliminate similar planning mistakes. IMF experts recommended to a broader range of EU-countries that independent fiscal councils should be established to ward off creative accounting by enhancing transparency and also to prepare an official forecast underlying the planning (Anett et al.). In the case of Hungary, the improvement of both dimensions would be a task of high importance. Optimistic planning practice and statistical revisions necessitated by the creative accounting are at the bottom of the substantial slippages from the programmes.

Three types of planning mistakes have occurred in Hungary in the recent period. Firstly, the estimation of the base year developments has always been optimistic. Secondly, the estimation made for the macroeconomic developments of the current year of planning has also proved to be optimistic. Finally, the estimation of the effects expected from the planned measures has been overly optimistic too.

In order to minimalise planning mistakes it would be necessary that the estimation of these three factors be made by an independent
organisation. This would make it possible for the fiscal decision-making (Parliament, Government) to exercise its primary powers, i.e. taking discretionary decisions. This means that Parliament takes decision on tax rates, but it is not practical that it should also vote on the predicted evolution of tax bases, which is eventually determined by the economic cycles and taxpayers' decisions.

Apart from this, there are problems with transparency in Hungary. The impact of fiscal policy cannot be adequately separated from the impact of the exogenous factors. The “true” activity of fiscal policy cannot be seen either, since the official accounting contains illusory items (creative accounting), while the size of the real (quasi-fiscal) activity cannot be observed (e.g. appears only some years later).

It would therefore be necessary to reinforce transparency with the analyses of an independent organisation. This organisation would in the first place separate the impact of the economic cycle, in the course of which it would treat separately the impact of the private sector's cycle and the revenue effects deriving from the change in public expenditures. (For instance, in case of public sector wage cuts, tax and contribution payment automatically decrease.) In the second place, in order to analyse the actual macroeconomic developments of fiscal policy it would apply its own analytical methodology to remove creative accounting from the official accounting, while augmenting it with the estimated size of quasi-fiscal activities. In the third place, it would present the development of expenditures and revenues both according to its own analytical methodology and based on the budgetary cash-flow data. In addition, it would make a detailed description of the methodology bridge between the official (legal) budgetary data and statistical recording of the ESA-methodology but without expressing an opinion on statistical methodology questions. Finally, the independent organisation would publish the structural deficit as a permanent component of the deficit. It would be computed with its own analytical methodology with the estimated effects of the cycles and of one-off items. Its own published methods would be followed in the calculations, and the time series would be continuously published. It is necessary to review the analytical methodology regularly since there may always be new creative accounting solutions emerging with the aim of circumventing the official (legal) and statistical accounting.

The annual activity and publications of the independent analyst-forecasting institution must be consistent with the timetable indicated in the budget act.

The Spring Report would have three functions. First, the analysis of previous year's fiscal and macroeconomic developments and its own forecast error would be presented. Second, a forecast would be given of the similar factors of the given year as the baseline period of planning. Finally, the fiscal and macroeconomic hypothetical baseline paths of the forthcoming years would be described which demonstrates what would happen if no new fiscal measure were taken and the one-off impacts would be removed from the developments.

The Autumn Report being published early September would also have three functions. On the one hand, it would update the fiscal and macroeconomic projections for the base year. On the other, it would review the estimate for the hypothetical baseline path (without corrective measures) of the next few years. Finally, it would present, in relation to the baseline path, the fiscal and macroeconomic effect of the submitted draft budget as the most likely paths. It would publish a fan chart showing the inflation, GDP and deficit projections for demonstrating the uncertainties surrounded the central projections.

In December, the Winter Report would review the forecasts of the Spring Report,
including in particular the forecast for the base year, the hypothetical baseline path of the following years, the fiscal and macroeconomic path based on fiscal measures adopted for next year, including the fan charts demonstrating the degree of uncertainty. The Government could rely on the forecast for the base year in its decision on the utilisation of the contingency reserve.

The results of the activity of the independent organisation could be best utilised if the forecasts for macroeconomic developments, inflation and yield curve were automatically taken over by the budget act. It is especially important that the Winter Report should give a last feedback in the final stage of the passing of the law. It is possible that the measures will considerably change after the bill is submitted. An IMF-study prepared in 1996 cites the example of Italy where – similarly to Hungary – modifications were made in the process of adopting the budget whereby the cover for actual expenditure surpluses was provided by uncertain revenue surpluses (increased tax base estimate).

Institutional solutions may also be of importance in terms of success. There is likely to be no need to set up a new institution. While the establishment of a new organisation would raise a number of problems, there would be nothing to guarantee that its operation is reliable, stable and effective over the long run. (Should it become cumbersome for fiscal policy, then it would be relatively easy to terminate or gradually phase out the new organisation.) Following from the function of the proposed institution, it is a practical solution to set up the organisation within the State Audit Office (ÁSZ) and its leader should be a vice-president elected by Parliament in accordance with the current regulation. It would contribute to its marked appearance if the organisation were given an independent image within ÁSZ which should also be reflected in its name. When finding an appropriate denomination, the name Fiscal Council should be avoided because it can easily be misunderstood. It is more desirable to choose a name that indicates that the organisation is part of a larger institution, for instance, Fiscal Institute or Budget Office.

**ILLUSTRATING THE OPERATION OF THE THREE PILLARS OF THE FISCAL INSTITUTE**

As I have mentioned earlier, the expenditure rule (first pillar) may have an essential role in respect of adjustment since an expenditure growth that is lower than nominal GDP can improve the deficit. The difference between the selection of the expenditure growth rate and the deficit reduction path determines what measure is required on the revenue side to attain a given deficit. The following numerical data demonstrate what additional steps must or can be taken on the revenue side under given deficit and expenditure rates.

- To make it simple, I have started out from the figures of the Convergence Programme (CP) published in December 2006. The estimated expenditure-revenue values shown for 2007 are consistent with a 2 percentage-point expenditure rate.
- Thereafter, I have prepared four scenarios based on the different primary expenditure rates of the state budget. I have extended the path with the different expenditures until 2015.
- In all scenarios I have assumed as given the savings on interest expenditures, the magnitude of revenues received from the EU and the net local government expenditures (i.e. expenditures minus budgetary transfers), which latter is determined by the usual investment cycle in accordance with the golden rule (second pillar). I have taken into account that there are one-off expenditures in the initial stage (see the Convergence Programme), which in the future will only be allowed by the
rule if it is counterbalanced by the reduction of permanent expenditures.

One of the tasks of the independent fiscal office or institute (third pillar) would be to assess the automatic shortfall in tax and contribution revenues as a result of expenditure cuts. Its other task would be to prepare an estimate of the macroeconomic impacts of expenditure cuts and the additional revenue measure required to meet the deficit target. Somewhat departing from the Convergence Programme, in the forthcoming paragraphs I assume that a 30 per cent of the total expenditure reduction will be realised in wages, 20 per cent of the total in the purchase of goods and services and investment expenditures and the remaining 50 per cent in transfers. Beyond their different tax content, their macroeconomic impacts will also vary. I have calculated the impact of the expenditure decrease and the required revenue measures with the iteration process using the coefficients published in a study by the National Bank of Hungary (MNB). (Horváth et al., 2006) On the other hand, I wish to underline that wages and consumption being dominant tax bases are more important in terms of macroeconomic impacts than GDP and inflation. I have not made an estimate to that effect, but according to the Convergence Programme these tax bases are likely to fall behind GDP growth, i.e. the revenue to GDP ratio will decline. If I took this shortfall into consideration it would lead to a lower potential tax reduction or a higher requirement for tax hikes than what is indicated in the table. Compared to the nominal GDP path of the Convergence Programme, the values I have shown were higher with respect to 2007–2008, but they were significantly lower in the next few years, because based on the findings of the MNB occasional paper, macroeconomic impacts emerge prolonged in time, moreover, the impact of continuous expenditure cuts cumulates. According to the results of the simulations, the changes taking place on the expenditure side have over this time horizon a more marked effect on nominal GDP than tax changes (except indirect taxes), therefore a stricter expenditure rule results temporarily in a somewhat larger extent of GDP deceleration.

In the following tables I shall outline the four scenarios (see Tables 1, 2, 3 and 4). In these scenarios the same projected deficit reduction is divided between the effects of a specific expenditure rule (see the net impact after the tax shortfall) and the residual tax changes (see tax measure to be adopted additionally). In the first case, in line with the rule, expenditures will be increased by 2 per cent until 2010, and by 4 per cent following that. In the second case, the expenditure growth rate will be 3 per cent from 2008 onwards. In the first case, the drop in GDP is greater, but faster expenditure-savings can turn around the initial tax rise (in 2007) already at the beginning of the period. Expenditure-savings are more balanced in the second case, and the rate of GDP deceleration will be slower, but tax reduction can only be launched starting with 2010.

In case 3, expenditure savings are smaller because the rate indicated in the expenditure rule permits a 4 per cent increase. Case 4 assumes an even higher – 5 per cent – rate. In the above cases, although GDP deceleration is of a smaller extent than in the former two scenarios, but due to the required tax measures the economic growth is not much more favourable. In case 3, a minimal tax increase would be required in 2008–2009, and the subsequent small level of tax reduction will turn around the effect of the initial increase only gradually by 2015. In case 4, the achievement of the deficit path will be noticeable in 2008–2009, followed by the requirement of a small tax increase in 2010–2011, and only then could a small tax decrease follow.

On the other hand, the different versions of the expenditure rule laying down various parameters (rates) vary in their degree of reali-
### Table 1

#### CASE 1: 2 AND 4 PER CENT EXPENDITURE RULES

<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>Primary expenditure without one-off items</td>
<td>47.4</td>
<td>44.8</td>
<td>43.2</td>
<td>42.1</td>
<td>41.6</td>
<td>41.2</td>
<td>40.6</td>
<td>40.1</td>
<td>39.5</td>
<td>38.6</td>
</tr>
<tr>
<td>Of which local government without subsidy</td>
<td>5.4</td>
<td>5.3</td>
<td>5.3</td>
<td>5.4</td>
<td>5.5</td>
<td>5.3</td>
<td>5.3</td>
<td>5.4</td>
<td>5.5</td>
<td>5.3</td>
</tr>
<tr>
<td>Expenditure falling under the rule</td>
<td>42.0</td>
<td>39.5</td>
<td>37.9</td>
<td>36.7</td>
<td>36.1</td>
<td>35.9</td>
<td>35.4</td>
<td>34.7</td>
<td>34.0</td>
<td>33.3</td>
</tr>
<tr>
<td>Rate specified in the expenditure rule</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Nominal GDP growth</td>
<td>8.6</td>
<td>6.1</td>
<td>5.4</td>
<td>3.8</td>
<td>4.5</td>
<td>5.6</td>
<td>6.0</td>
<td>6.1</td>
<td>6.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Reduction of primary expenditure</td>
<td>−2.6</td>
<td>−1.5</td>
<td>−1.1</td>
<td>−0.6</td>
<td>−0.4</td>
<td>−0.5</td>
<td>−0.6</td>
<td>−0.6</td>
<td>−0.9</td>
<td></td>
</tr>
<tr>
<td>Tax shortfall</td>
<td>−0.4</td>
<td>−0.3</td>
<td>−0.2</td>
<td>−0.1</td>
<td>−0.1</td>
<td>−0.1</td>
<td>−0.1</td>
<td>−0.1</td>
<td>−0.1</td>
<td>−0.1</td>
</tr>
<tr>
<td>Net impact following loss in tax</td>
<td>−2.2</td>
<td>−1.3</td>
<td>−0.9</td>
<td>−0.5</td>
<td>−0.3</td>
<td>−0.5</td>
<td>−0.5</td>
<td>−0.5</td>
<td>−0.7</td>
<td></td>
</tr>
<tr>
<td>Interest expenditure</td>
<td>3.9</td>
<td>4.2</td>
<td>4.1</td>
<td>4.1</td>
<td>3.9</td>
<td>3.8</td>
<td>3.6</td>
<td>3.5</td>
<td>3.3</td>
<td>3.2</td>
</tr>
<tr>
<td>One-off expenditures</td>
<td>0.7</td>
<td>1.0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>52.0</td>
<td>50.0</td>
<td>47.4</td>
<td>46.2</td>
<td>45.5</td>
<td>44.9</td>
<td>44.2</td>
<td>43.5</td>
<td>42.8</td>
<td>41.8</td>
</tr>
<tr>
<td>Unchanged revenue only with tax shortfall</td>
<td>42.0</td>
<td>41.6</td>
<td>41.3</td>
<td>41.1</td>
<td>41.0</td>
<td>40.9</td>
<td>40.9</td>
<td>40.8</td>
<td>40.7</td>
<td>40.5</td>
</tr>
<tr>
<td>Deficit based on the expenditure rule</td>
<td>−10.0</td>
<td>−8.4</td>
<td>−6.1</td>
<td>−5.1</td>
<td>−4.4</td>
<td>−4.0</td>
<td>−3.4</td>
<td>−2.8</td>
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### Table 2

#### CASE 2: 3 PER CENT EXPENDITURE RULE

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**CASE 3: 4 PER CENT EXPENDITURE RULE**

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**CASE 4: 5 PER CENT EXPENDITURE RULE**

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<tr>
<td>Revenue without EU-transfers</td>
<td>40.7</td>
<td>41.4</td>
<td>41.8</td>
<td>42.3</td>
<td>42.6</td>
<td>42.6</td>
<td>42.4</td>
<td>42.2</td>
<td>42.2</td>
<td>41.9</td>
</tr>
<tr>
<td>Auxiliary measure</td>
<td>1.1</td>
<td>0.5</td>
<td>0.5</td>
<td>0.2</td>
<td>0.1</td>
<td>–0.1</td>
<td>–0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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ty, or rather, they assume that the extent of improvement in the efficiency of expenditures will be different, but it cannot be expected without special measures. As we have seen, the GDP ratio of mandatory expenditures, i.e. those that cannot be altered without legislative changes, reaches 11 per cent (pension, sick pay, EU-payment). In legal sense, in the budgetary procedure there is a scope for action in respect of the remaining – currently 31 per cent – expenditure. Whereas, in economic sense, both mandatory and annually altered expenditure items can be reduced, and the level of savings achievable in the various expenditure items depends on other – such as practical and feasibility – considerations. As a starting point, by following a possible division, expenditure items are broken down into open-ended and closed-ended items, including centralised and decentralised ones within the latter (P. Kiss, 2007).

With a more detailed expenditure breakdown, we can overview the practicability of the changes and the potential impact of measures that can be considered of average extent.

Open-ended expenditures are expenditures whose achievement depends on some exogenous factors and, as a consequence, their midyear developments is subject to modifying the appropriation.

The interest expenditure depends on the development of yields and exchange rates. It is justified to remove these items from the scope of the expenditure rule.

Out of normative transfers, also falling within open-ended expenditures, mandatory expenditures (pension, sick pay, EU-payment) are driven by macroeconomic and demographic developments, such as wages, inflation, economic growth and the number of retiring persons. There are two reasons for including these items within the scope of the expenditure rule. On the one hand, altering the parameters of the pension system is not justified merely owing to the expenditure constraint, but rather, for the sake of long-term sustainability. On the other hand, even in respect of these items it is worth curbing discretionary measures increasing expenditure, for example the “rounding up” of the annual increase of pensions calculated according to the Swiss index. Mandatory expenditures would show savings based on macroeconomic developments – Swiss indexation –, but the demographic trends produce an adverse effect, thus in one-fourth of the expenditures falling under the scope of the expenditure rule, no savings can be expected without corrective measures.

Out of normative transfers, the proportion of non-mandatory expenditures (with annually changing parameters) is around 6.5 per cent of GDP. The third of it consists in family allowances, the reduction of which would be unfavourable for demographic aspects. Pharmaceutical subsidies represent more than one-fourth of the expenditures and, based on the trends, an expenditure rate exceeding GDP growth can be assumed. However, if substantial measures are taken this can be moderated back to the rate of GDP growth. Unemployment benefits only amount to 0.4 per cent of GDP, but owing also to the impacts of adjustment, additional expenditure is more likely to be expected. The public transport subsidy and the normative subsidy granted to enterprises come to 0.8 per cent of GDP; in this case a 4.5 per cent nominal expenditure growth would be required to achieve an annual 1.5 per cent improvement in efficiency. The remaining 1.2 per cent expenditure includes other household subsidies. In the latter cases, a 5.5 per cent nominal rate per annum could be attained realistically, since it would represent a 0.5 per cent shortfall compared to the nominal growth of GDP. On the whole, the annually changed normative transfers would be widened in a 5.7 per cent rate a year.

Closed-ended expenditures are defined every year, based partly on the budget act, partly on
the budgets of local governments and partly on the decisions of the various institutions.

Of closed-ended expenditures, operational expenditures amounting to 19.2 per cent of GDP are determined, within a specific framework, by local governments and budgetary institutions. Since the local government expenditure is influenced by the expenditure rule only through the budgetary transfer, therefore merely 16.6 per cent of GDP is affected (the other expenditures are covered by own revenues). In case of operational expenditures, an annual 1.5 per cent efficiency improvement can be accomplished through average scale of measures (this corresponds to the trend of the productivity of the former period assumed by the Central Statistical Office (KSH)). As the nominal GDP growth of the period under review is around 6 per cent, consequently, attaining a similar growth rate in the government sector under 1.5 per cent efficiency improvement would call for a 4.5 per cent increase in nominal expenditures.

Of closed-ended expenditures, local government investments and enterprise subsidies amount to 2.7 per cent of GDP. I assume that these investments are covered by local governments using their own revenue (EU-funds) and credit, rather than from central subsidy, as a result they are not affected by the expenditure rule.

Of closed-ended expenditures, a part corresponding to 5.3 per cent of GDP is utilised by the central government. No savings can be expected from that in case of central investments: the utilisation of EU-funds is more likely to result in expenditure overruns. If we assume that EU-funds will replace other investments, then a 10–12 per cent nominal growth will be achievable annually. On the other hand, in respect of enterprise subsidies, a degree of efficiency improvement comparable to operational expenditures can be assumed. This efficiency improvement can for instance be assured in the case of subsidised public utilities.

In summary, if we assume that average measures are taken in case of expenditures falling under the scope of the rule a 5.5 per cent growth per annum can be considered realistic. (See Table 5) This means that if a 5 per cent expenditure rate were set by the expenditure rule, then other further expenditure measures

<table>
<thead>
<tr>
<th>EXPENDITURE STRUCTURE IN 2004 AND ASSUMED GROWTH RATE, 2008–2015</th>
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<tbody>
<tr>
<td>Expenditure (GDP per cent)</td>
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<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>Open-ended expenditure</strong></td>
</tr>
<tr>
<td>Interest and interest subsidy (housing construction)</td>
</tr>
<tr>
<td>Mandatory normative transfer (pension, sick pay, EU-payment)</td>
</tr>
<tr>
<td>Annually changed normative transfer</td>
</tr>
<tr>
<td><strong>Closed-ended decentralised expenditure</strong></td>
</tr>
<tr>
<td>Wages and purchase of goods and services of local government and budgetary units</td>
</tr>
<tr>
<td>Local government investment</td>
</tr>
<tr>
<td>Local government subsidy to enterprises</td>
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<tr>
<td><strong>Closed-ended centralised expenditure</strong></td>
</tr>
<tr>
<td>Central investment</td>
</tr>
<tr>
<td>Central subsidy to enterprises and other expenditure</td>
</tr>
<tr>
<td><strong>Total expenditure</strong></td>
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would be required. To illustrate its magnitude it would be necessary – for example – to replace the Swiss indexation of pensions with inflation indexation or to cut the number of public-sector employees by a further 1.5 per cent every year on top of the small degree of reduction achievable with average measures. This would imply that employment within the government sector would drop by a further 11.5 per cent during eight years.

SUMMARY

I have proposed a three-pillar institutional proposal in order to reinforce fiscal transparency and responsibility. Its first pillar is the expenditure rule which can be a means of adjustment by curbing the growth of all expenditure-type items under central control. The second pillar is the golden rule of local governments according to which indebtedness can grow only as a result of a shortage in the capital balance. The third pillar is an organisation watching over transparency and preparing estimates for the impacts of exogenous factors and fiscal policy measures, as well as supporting transparency by separating the impacts of creative accounting, one-off measures and the economic cycles.

I have proposed the introduction of constraints to promote the efficient operation of the three pillars. The first constraint prevents the circumvention of the expenditure rule through broadening the category of expenditures (tax expenditure, guarantees). The other constraint prevents spending cuts from having a disproportionate impact on local government expenditures. The third constraint prevents deviation from the expenditure rule by generating a contingency reserve.

The proposed solutions make it possible for the fiscal policy to make reallocations within the growth limited by the expenditure rule as well as to modify the tax rates to the extent which is consistent with the deficit cut. Apart from this, the local government sector would remain independent, since they could even in the future carry on running the four-year investment cycles applied in the past. The three pillars and the three constraints can contribute to meeting the deficit targets and if the targets are missed – in the revenue-side or by the local governments – this setup makes it clear where the responsibility falls. It will however be up to us whether we take the institutional solutions seriously and whether they represent a passport into the domain of fiscal discipline or, as a pass partout, would offer only temporary help in masking our deficit bias.

Notes

1 The EC constructed a synthetic indicator that relies on the scope (“intensity”) of the rule and, based on its characteristics, on its potential efficiency. (Ayuso-i-Casals et al.). IMF experts also constructed a composite index for independent organisations. (Debrun – Kumar) Both analyses came to the conclusion that the independent organisation is beneficial for developing the fiscal rule, but different results were achieved as regards the relationship between institutional solutions and the fiscal outcome.

2 This approach is similar to the current regulation applicable for local governments which regulation imposes a constraint on such a broadly defined category of annual debt-creating commitments that includes the change in the guarantees issued as well as in the stock of leasing.

3 The ad-hoc year-end spending of the reserve corresponding to 1.5 per cent of GDP is not desirable, therefore a part of it can be earmarked reserve. In this case, this reserve can act as an incentive for meeting the deficit target.

4 These include pharmaceuticals, pension, sick pay, housing construction, social benefit and the normal-
tive subsidies of local governments and other organisations.

5 A substantial item is the pensions increasing pursuant to the Swiss index (10 per cent of GDP), the sick pay due after earlier wages (0.4 per cent), the EU-payment (0.7 per cent) and the interest subsidy of housing loans (0.6 per cent). It may be justified to omit the latter item from the scope of the rule similarly to interest expenditure. On the contrary, in the case of family allowances (2.1 per cent) and unemployment benefits (0.4 per cent) the nominal ceiling, effective for most recipients, depends on discretionary decision every year.

6 A higher-than-GDP growth of the expenditures spent on pharmaceuticals is noticeable in the developed countries. In Hungary, the government subsidy within this expenditures grew at an even higher rate between 2001–2006 representing a 8–16 per cent increase in real terms despite the corrective measures.

LITERATURE


International Monetary Fund: Italy-2005, Article IV Consultation Concluding Statement of the Mission


Joseph E. Stiglitz

The roaring nineties

A new history of the world’s most prosperous decade

DAYLIGHT PUBLISHING HOUSE (NAPVILÁG KIADÓ),
BUDAPEST, 2005

By using the trendy word “mainstream economics”, we mean partly the modern textbook macro- and microeconomics but modern finances, international business studies and market structure theories also belong to this discipline. Formal mathematical reasoning and argumentation are frequently indispensable elements of the mainstream, while the rejection of the quantitative modelling of economic phenomena on either empirical or logical grounds is often a tool for attacking the mainstream. But what can we say when it is an economist belonging to the mainstream, who has received the highest professional award for his modelling activity who undertakes to criticize the economic policies based on the mainstream?

The recipes of the economic policies inspired by mainstream economic theories were summed up by the so-called Washington consensus in the early nineties. These types of management were required in the countries with transforming economies rather than in the developed countries, where the way for the development of the market economy had to be paved. To convert a socialist plan economy into a market economy was only possible through market liberalization, privatization and in general, through the significant reduction of the state’s role. In the opinion of many, this is what the textbook recipes, written on a mainstream basis, in fact contained and ample references were made to them. If, however, we take the example of Slovenia, what we can see is that highly successful market economy transformation was not at all hindered by cautious liberalization and privatization, while in Russia, for instance, distorted market and ownership structures also developed in large numbers as a result of hasty and non-transparent privatization and liberalization processes.

Let us just ask the believers in quick and complete transformation about the essence of main-
stream textbook recipes. It is not sure that they are aware of all the components – it may easily be the case, for example, that they will fail to mention the existence of a stable legal system, strong consumer protection and a small size but all the more efficient and transparent state. We know from market theories that the hopes for the self-corrective ability of the market are not necessarily an efficient tool for fighting against the market players that tend to use the dominance structures and the information asymmetry. If, for example, we would like to introduce a multi-insurance system in health care, we will also have to establish the strong and sustainable legal guarantees thereof. Otherwise we may get into a situation similar to certain clients of (in theory) competing motor vehicle insurance providers whose damage claims cannot be settled by the insurance companies, which otherwise wish to satisfy their clients' needs.1

Thus, the problem lies not in mainstream economic thinking but in its frequently unprofessional application. This is a fact which Joseph A. Stiglitz is well aware of – he earned his Nobel prize by conducting research in an area close to the mainstream, in the economics of information, and he has confirmed his professional reputation as a harsh and consistent critic of globalization in the recent years. This is why many people tended to judge him and his activities by the same standard as even those of certain radical politicians, or as certain works of David C. Korten, a vehement but sometimes highly unprofessional critic of multinational companies. For his book entitled “Globalization and Its Discontents”, Stiglitz was strongly criticized in the Hungarian reviews as well. These reviews were written, among others, by such ambitious young economists who may have wished to please their tutors by crashing Stiglitz's complete set of professional arguments in a few pages.

His later book looks back at the nineties, and singles out not globalization, or the Washington consensus in itself but the way how many people misused these slogans and got very rich as a result. Economics has not seen many responsible and high-standard provokers since Schumpeter but Stiglitz is definitely one of these few. He does not deny that the decade of the nineties has brought a never-seen growth of well-being in many countries and that market liberalization and globalization, which extended the latter way beyond country borders and traditional trading, had released a genuinely high amount of energy for growth. However, the incomes of numerous corporate leaders grew explosively and in many markets, such as in the real estate and ITC sectors, bubbles causing grave market instability developed. This expression stands for quick but unsubstantiated price and exchange rate growth processes, which can only be reversed by causing unexpected and serious losses.

It turned out in the nineties that the reduction of state regulation with excessive speed and in lack of the appropriate legal securities did not only involve an acceleration of growth but also resulted in major differences in income, while it created energy use, work sharing and money market structures, which were increasingly getting farther from the optimum. The equilibrium problems of the international financial system increased and the traditional corporate governance systems proved to be insufficient for protecting the shareholders and the corporate pension funds.

The most famous of such cases was the Enron scandal. One of the then Big Six companies, i.e. an international audit and financial services firm globally known for its reliability and integrity and charging high fees, got entangled in the case. Here we are talking about the fundamentals of market economy: if the organizations and legal instruments meant to guarantee the protection of the investments and the shareholders do not work properly, such a confidentiality crisis may evolve which may even
lead to the crashing of Stock Exchange prices and may destabilize the essential institutional and market elements of the market economy.

Stiglitz by far does not claim that the problem lies in market economy and the fundamental institutions thereof, what he rather does is to encourage a more professional development and stricter observance of the rules. Reading his book, we may become even more convinced that market liberalization should be demanded only by those who are able to tell how the imbalances and market interruptions evolving in the wake of partial or complete failures can be remedied. A reform is not valuable in itself, just because it provides something new, it will only represent value once it may result in a genuinely Pareto-optimum or at least second best type of change.

Reforms, which mean substantial intervention, should also be “followed up”. If we take the Hungarian pension reform that took place 10 years ago as an example, the not too reserved spokesmen of the then lopsided reform should have the courage to explain the following in 2007: what they have not reckoned with and to what extent they have misled (obviously not on purpose) the people who transferred to the private pension fund system, those who can expect lower returns from this system for several years than the beneficiaries of the state pension system, which is in fact aged and inefficient but at least reliable. And let us not forget that the pension reform of 1997 has increased the GDP-proportionate budgetary deficit in Hungary by 1–2 percentage points for several decades.

Thus, Stiglitz's book may become especially meaningful for us when we attempt to discuss reforms on a non-ideological basis. We should have the courage to claim a stable legal system underlying the institutional background of the reforms, rather than a vague and freely adaptable frame regulation, where it is offending to bring up the question of responsibility, where the ownership of apartments or other personal assets may be exchanged as a surprise and way below their market prices without the efficient protection of citizen's rights to ownership, and where the excessive protection of personality rights may even hinder the investigation into life-threatening crimes.

As a result of all these, this review seems to welcome the Hungarian edition of Stiglitz's book, which encourages meaningful discussions and is food for thought. This is not at all the case. The situation is that the Hungarian edition was prepared at such a low professional standard that I do not at all recommend it to my acquaintances. It is true that those who are interested in this topic mostly speak English, so I may feel free to call their attention to the original version rather than the Hungarian one.

Unfortunately, the translator of the Hungarian version does not know the Hungarian technical language of this topic and regularly gives wrong translations, which results in gross and annoying mistakes. Savings and Loan Associations, i.e. S&L's, for example, are translated into the Hungarian as “S&L companies”, as if this were a group of companies (page 67), then sometimes the translator calls them “deposit lenders” (page 89). Deposits are placed in banks by the customers but the banks do not lend these deposits to anyone.

The English word academic (which means a person belonging to the academic sphere, one working at a research institute or a university) is translated into the Hungarian as “akadémikus” (which means a member of the Academy) (pages 12, 26, 89). Monetary and financial policies are used interchangeably (page 103) and the translator only knows one meaning of the English word plan. Pension plans do not mean 'corporate pension designs' (page 273) but pension funds. To translate the word 'derivative' as a 'complicated financial product' (although it is in fact complex!) is funny, to say the least (page 148). Capital market booms are not equal to
‘taking off’ (page 159) just because the original English text contains the word *takeoff*, which also has the meaning of flying off from the ground. The economic profession does not talk about ‘rational requirements’ (page 165) but *rational expectations*.

The word ‘activist’ (page 184) makes no sense in this context. We should not be thinking of May 1 demonstrations or trade unions here: the American technical language designates the believers of the regulatory trend known as activism by the word *activist*. No such expression exists as ‘tőzsdepiac’ (‘Stock Exchange market’) (page 236), and ‘stranded costs’ is a ridiculous mixture of images (page 250). The original must have been *sunk costs*, which is usually translated into the Hungarian as ‘elsüllyedt költségek’ (literal translation). However, this does not convey the real meaning of the word, I myself have tried to use the version ‘invisible developments’ several times, which better reflects the essence of the expression, although it undoubtedly sounds a bit absurd.

I am not sure that the translator has an in-depth knowledge of the American English, as she does not even understand some frequently used expressions either. The literal translation of the expression *smoking guns* is right (page 252) but in fact this is a metaphor. Evidence left at the site of a crime, undeniable, telltale signs are meant by this expression.

It is highly probable that the translator had a very tight deadline for the translation and was constantly urged by the publisher. We also have to accept that the Hungarian practice of publishing has not been able to pay for the services of a professional reviewer for a long time. Still, even a rushed translator is expected to take a final look at her translation. She could thus have avoided writing “Harward” instead of “Harvard” (page 10), “Kernal Dervis” instead of Kemal Dervis (page 17), or “Arro” instead of *Kenneth Arrow* (page 47), as the original contained the right names.

In the current state of Hungarian publishing, it is unfortunately not completely surprising that a review has to call the audience’s attention to even such details. In this situation, we only recommend the Hungarian version of the Stiglitz book to only very quick and superficial, or exceptionally tolerant readers. However, the publisher should think it over whether it is worth investing money into a professional bestseller, which is very interesting and will probably attract a broad audience in such a way. Word may easily spread that the translation is not only bad but also impossible to understand, or that it even distorts the sense of the text at many points. If this is the case, then only the collectors of curiosities and the fans of mistranslations will find it worthwhile to buy the current edition.

*Ádám Török*

**Note**

1 In the case of certain types of obligatory insurance, for instance, the insured person pays a low premium, while the insurance company only maintains one claims settlement office in the entire country, and even this is sometimes difficult for the claimant to achieve. This does not deteriorate the insurance company’s chances in competition, since in the case of this type of insurance, the underwriter is not the same motorist who may later file the damage claim.
All monographic overviews of the transition of our region may command interest, as this is a rarely used genre. Perhaps the scarcity of works in this genre can be explained by this overnight transition of whirlwind speed and twists, and not in the least by the unexpected outcome in many respects, which shocked both the observers and the participants. If you have or had something to say on this subject, you can now mostly do so on the pages of daily and weekly papers, and of course in the electronic media, which is somehow both a constraint and a requirement. At least this must have been so in the first decade, as the need to act often preceded the willingness and speed to analyze. Haste is even more dangerous here than in our everyday life, due to the century-old academic requirements, the need to keep a distance and have an overview on the subject that we discuss. The situation described in the Russian proverb, which was once often quoted in its negative sense, “measure seven times before you cut off once” is obviously unavoidable in this genre. However, there were hardly any analysts who could have and wished to have withstood to attempt to use a chance that you have only once is history: that is, to test the theories and to form reality. Being a “technopol”, which word was coined by John Williamson (1994) by merging the words “technocrat” and “politician”, became a lifestyle. And as a result, both some of the acknowledged researchers of our region, from Béla Kádár to Leszek Balcerowicz, and the well-known cultivators of the mainstream theories like the late Rüdiger Dornbusch or the Nobel prize holder Joseph Stiglitz have felt inclined to analyze and influence the transition.

This genre and lifestyle, in the experience of the participating observer, has always involved typical advantages and disadvan-
tages. On the one hand, exciting questions, which were earlier not thought about, emerge in practice – this was the case with the issues of the rate of unemployment, the dramatic decrease in participation in the labor market, or the transformation of the prematurely born welfare state. On the other hand, however, the various and contradictory assumptions of theory passed the test of practice, from disinflation through exchange rate policies to the issues of the sustainable balance of public finances. As a result, both the subject and the approach of analyses tend to change fast. Becoming obsolete, which is part of the essence of science, the regular questioning and testing of earlier theses have made it necessary to replace subjects, approaches and results faster than usual, and even faster than the speed well-established in social sciences, let alone the applications.

Exactly because of this, it is by far not a coincidence that the literature of transition in all the disciplines has come to consist of the passing genres mentioned earlier on the one hand, and the articles published in journals and lectures presented at conferences on the other hand (the latter were often published by major publishing houses in the form of collections). By now, the time of transitology or education on economic policy, which are the ironically ambiguous names for this genre, has gone, as a result of the high number of conferences, the amount of research funds, or the supply of leading book publishers and journals. Still, we can hardly claim that social sciences in general, and economics in particular, have provided more or less mature answers, which can be regarded as final, to certain questions that public opinion is still very much interested in up to this day. This is true for privatization, as well as the functioning of democracy, or the mutual relationship between the independent regulatory and supervisory authorities such as the State Audit Office, the Office of Economic Competition, or the courts, and democracy.

Thus, there is a lot to analyze, and all such ventures are welcome which are aimed at the publication of articles analyzing these chaotic issues still to be explored in the form of a monographic volume and with scientific purposes. However, the publisher undertakes a rather high risk, as the material tends to become obsolete faster than is customary even in science with regard to the subject, the facts, and the conclusions as well. It also makes a great difference at what point in time a certain author wishes to talk. For example, the opinions represented by the international financial organizations with regard to development and combating poverty were totally different in the 1970's and 1980's than now (Ricz, 2005). This deep-going change is valid for the evaluation and interpretation of transition as well, first of all with regard to the stand taken by the once leading economist of the World Bank Joseph Stiglitz and the ensuing noisy disputes (described in detail by Szakolczai, 2006). To put it shortly, what may have sounded critical or even revolutionary a decade ago can be called public knowledge these days, even in Washington.

The author of the book under our review is Olivier Blanchard, one of the most influential advisors on, and analysts of economic policy, whose articles are published in leading journals from the Quarterly Journal of Economics to Economic Policy. The author is primarily known for his analyses of macroeconomics, labor markets, and the European economy and European integration. In his work, providing advice to countries in transition has been regarded as a borderline area, just like for the earlier quoted Dornbusch, Stiglitz, or Jeffrey Sachs, who has become known as a development expert, more precisely, the researcher of Latin America and Sub-Saharan Africa. This is relatively easy to understand.
In the case of Blanchard, the textbook, which already had its third edition in 2003, has 583 pages, its predecessor, also published several times, and co-authored by Stanley Fischer, counts 650 pages. However, two books on the subject of transition are only co-authored by him, and the currently discussed book only has 166 pages, and what is more, the mini-pages used in the current edition would make up a two-part journal article, by well-established measures.

The question may arise: why was the volume published right now? The statistics presented in the book regularly end in 1994 (sic!), which was quite a while ago. And quite many things happened since then. Thus, at the moment the most exciting question of economics is presumably not how the private sector and mainly the service sector will absorb the employers falling out of the socialist dinosaur companies and not trained for the market economy, any longer, which is the subject discussed by our author. The question now is what halted the transition process after Hungary’s joining the EU, contrary to the naive expectation of most of us: the acceleration of the transition process. Both are definitely serious questions, as the pure statistical review of the period between 1994 and 2006 is a nice task by itself (E. Németh, 2006; ECE, 2006), which requires the compilation of an entire volume. And the second question is none the less exciting, and is by the way considered a mystery or a puzzle in researchers’ slang. However, you cannot expect the author to answer this question, since in 1996 he prepared an absolutely fair summary review of what we knew about some of these issues at that time, by using the tools of mainstream analysis in an exemplary manner.

The thing is, as has been confirmed by the experience of the coming decade, that at that time we were presumably happy with the answers, while we were not yet aware of all the questions. For example, how the sustainability of economic policy, including public finances and economic constitutionality, can be ensured in Continental Europe in its broad sense, how populist turnabouts can be prevented, how the series of changes responsible for financing the welfare state can be organized with permanent effect, even in an ageing society, along with the reform coalition that supports these in a sharply divided Hungarian society, structured along very different interests and values. And while we do not wish to receive a recipe for solving our own problems from an outsider analyzing the entire region, it would be hard to dispute that the “post-communist transition” (if this expression from newspaper language has retained any scientific meaning by now) now brings up entirely different questions of economics for the analysts than more than a decade ago when the work under review was prepared. Presumably, many share the opinion coming from the mid-1990’s that the period of transition, i.e. the specific historical phase of eliminating the single-party system and the heritage of the Soviet Empire, came to its end by the turn of the millennium the latest. By Hungary’s accession to the European Union, most probably, different types of questions related to the reform of the Continental welfare model, or those of setting the new factors of growth into motion, will come to the focus of economic analysis and management (Csaba, 2006).

The brief summary of Professor Blanchard consists of four main parts, in which the author gives a fair overview of the issues of stabilization, liberalization, privatization and corporate adaptation, which used to be characteristic features of the first phase of transition. From among the tasks which are now commonly abbreviated as SLIP in international literature, “I”, that is, the building of Institutions, is conspicuously missing, which is probably not a mere coincidence in the case of a mainstream
The author. In the first chapter, the decreasing production and employment, and the subsequent recovery in Central Eastern European countries are described. The author examines why the transformation brought about an unavoidable regression, or as he calls it, the U-shaped evolution of macro indicators. In the second chapter, the author describes in a model form what mechanisms served as vehicles for transformation, primarily on the micro-economic level, i.e. how the companies were transformed and how capital was redistributed among the individual sectors, one of the means to accomplish which was disorganization. Here (page 69) he draws the conclusion that the upturn was initially related to increased productivity, which was not (yet) followed by any increase in employment at that time.

In the third section, the author sets out to examine how the companies adapted to the initial shocks, he emphasizes the relationship between corporate transformation and privatization, and finally, he analyzes the characteristic features of the labor market. The author was one of the first to point out (page 72) that the unemployment rate, which even exceeded that of Western Europe at that time, can be classified as one of the most serious permanent challenges facing the transforming economies of the region, as this unemployment was dominantly structural (i.e. it cannot be remedied by lax budgetary policy). He specifically highlighted the permanently high proportion of people who cannot exit the status of permanent unemployment (pages 108–109).

In the fourth chapter, the issues analyzed earlier are merged into a standard model. It is explained here that the private sector can only absorb mass unemployment with a delay and if certain conditions exist, but then it is this sector of privately owned companies that means the source of growth in itself. However, in his view the level of unemployment arising from the transformation of companies and the capital flow between the individual sectors may considerably decrease when the transition process is over. From among the very clearly defined conclusions that act as the closing of the book, a certain opinion, which is still a minority view, should be highlighted (page 146). The essence of this view is that the right solution is to provide certain benefits to the insiders and to centrally manage the ownership reform, while the approach that misuses the idea of Hayek on spontaneous order and expects economic advantages from the mass distribution of assets is (was) not right. Similarly lasting is the conclusion according to which the growth of the private sector should not be prevented by tools of tax policy from the very beginning, since the growth of the entire national economy will turn out to be very slow in that case. Finally, the author talks about the voluntarily undertaken limits of his analysis, i.e. the limited nature of comparative and forward-looking, forecasting elements. Blanchard, however, was justified in cautioning against the spreading culture of unemployment (page 147), which could have resulted, and actually resulted in the accumulation of social and economic losses, as the unemployment rate way that exceeded the OECD average was in fact a grave problem in the societies of many countries in the following decade.

Thus, the overall picture may be characterized by a peculiar duality. On the one hand, we have to acknowledge that the knowledge available at the time of writing the book, as well as the standard theory were applied by the author in excellent quality and of lasting effect. The observations made by the author on the issues of unemployment and growth, as well as privatization are exemplary in their universal validity, the way of presentation is concise and applicable for classroom usage. However, I as a practicing educator, would strongly recommend against the latter, since
neither the subject of this topic nor the facts relevant for our region coincide with those of this book. Today’s audience should not only master the up-to-date facts but also today’s questions of analysis, in due time. In the country of János Kornai, we cannot claim that an insufficient number of Hungarian and foreign language analyses is available on the issues of transition. We cannot even state that in graduate training, we have not continuously included, since 1993, to the extent defined by the training staff, the Hungarian language literature of international standards, presenting the international disputes in the framework of the curriculum (namely, the textbook written by Zoltán Bara and Katalin Szabó, which already has its sixth edition; Bara – Szabó, 2006). As far as I know, this textbook is used by the market-leader Corvinus University, as well as the Pécs and Debrecen universities and some colleges, i.e. there is no market niche in this sense. On the other hand, however, in a world where, by now, it is almost merely the articles sponsored by the author and targeting the captured audience that will appear, the enterprising spirit of the National Textbooks Publishing House should be highly appreciated. Perhaps by publishing the original analysis of a less well-known but contemporary Hungarian author, the noble aim, i.e. making world standard, teachable knowledge available, may have better been achieved.

László Csaba

Notes

1 This is pretty obvious in the history of sciences, if we only think of the development of brain research or nuclear physics. But, for instance, in literary sciences, finding a piece of literature thought to be lost, or in musical science, a novel presentation of earlier unknown works, or else, an archeological finding in historic science may bring about fundamental changes (even in ancient science, especially there!).


3 This was partly so, for instance in Hungary and lately in Russia, but partly not so, for example in Slovakia, Poland and in the ex-Yugoslavian countries, including Slovenia. This depends on the preservation or breaking of the power of insiders, which is country-specific. This is a good example for the limited nature of conclusions that we can draw on “certain issues of the post-communist transition” in general.

Literature


How to make a creditable economic policy?

Tibor Erdős

Growth potential and economic policy

Tibor Erdős’s academic work – I believe – is characterised by two dominant features. The first is an unyielding consistency with which he becomes engrossed in the subject he is interested in, develops and progresses from general correlations to details, and at the same time, from the theoretical correlations to practical utilisation (in our case towards economic policy). Since I know him, he has always been occupied with the conditions of long-term economic growth, the growth problems of developed industrialised countries, i.e. the impetus and the driving force behind the growth process, the general modernisation taking place in the wake of innovations and technological development. These were the main topics of his heftier books already back in the 1970s and 1980s, namely, decades before the political transformation. His long study published in 2003 (also managed by the Akadémiai Kiadó) about the conditions of sustainable development is the continuation, several years later, of the same general direction. This more recent work is also mapping out the factors influencing the long-term growth trend (keeping abreast with the latest developments of the theory on long-term growth, now on the grounds of the Schumpeter traditions of endogenous growth, and not being averse even to the sometimes complicated mathematical apparatus attached to the theory). The author’s intention has been manifest even in this work, i.e. to address the growth dilemmas of the economy after the Central and Eastern European, then concretely after the Hungarian millennium, by going well beyond the description of the general criteria of sustainability with perhaps a few specific examples, but this time his study is based on the paradigm of innovation-based development.

Erdős’s book on sustainable growth was followed by some of his articles published in pro-
fessional journals? These can already be considered as a sketch or preliminary study for his recent paper. His book published last year on the subject matter of economic policy, as a matter of course, continues to deal with the growth trend characterising a particular national economy (or perhaps a particular region). However, it no longer follows the highly abstract approach of long-term growth models (see the Solow-model), but couples the growth trend with the function of the state which inevitably strives to shape the development criteria, and consequently, with the state’s economic policy means, and looking at its scope for action and impact mechanisms, thus coming one step closer to practice.

So the sphere of interest and the topic remain the same, whereas the manner of treating them has changed considerably. The starting question raised reads something like this now: “what is the apparent message of the theory of sustainable growth for the strategic decisions of economic policy currently on the agenda?” (In the case of Hungary, it is related to the reform debates, the stabilisation path described in the Convergence Programme, or to the by now uncertain target date of euro-accession.)

On top of an insistence on the fundamental theme, the author’s other characteristic feature is that he is a professor who has spent a dominant period of his life teaching at university. Owing to this pedagogical role and mainly to Erdős’s disposition, the new study addressing the relationship between growth potential and economic policy is didactic, meticulously structured with almost a geometrical accuracy. There can hardly be any undisciplined diversions observed from the main course of the material.

The book contains five chapters together with the summary, and each chapter examines totally identical aspects and criteria at different levels of analysis. The first chapter discusses the major factors which determine growth potential (growth trend), their structure and the non-reversible correlations of cause and effect. This part is still only a pure theoretical model. In this section, Tibor Erdős summarises his views already expressed in some of his former papers on the factors influencing long-term growth. According to his often underlined conviction, Erdős’s point of departure is that the long-term growth rate (theoretical maximum) of productivity is defined by technological development. (It is worth highlighting that in an emerging country, such as Hungary, the “secondary” technology, secondary know-how transferred by more developed countries has an important, perhaps a key role in technological advance. In a given case, this can temporarily be a significantly stronger growth factor than the world’s leading technology. It would probably be justified to overview it separately in the approach of growth patterns.) All other growth factors originate from this, i.e. technological advance.

The growth of investments is a factor arising as a consequence of and subordinated to the speed of technological development (i.e. if investment expansions are faster than justified by the technological advance, then the law of diminishing returns will without mercy prevail). A further criterion, the level of savings, arises from investments (namely, national savings including not only household savings but also the savings of the budget and the corporate sector). The merit of the study is that, as against the growth patterns concentrating generally on “real factors”, it stresses that in given situations the role of the financing side is becoming critical from the aspect of the growth process.

The emphatic role (restricting character) of the financing side calls forth an independent treatment of external funds which represent an increasingly critical additional item. Furthermore, in the author’s opinion, as a
result of the change in the conditions of economic growth, the institution system and the environment (environmental load) appear among the other relevant factors determining growth potential. Finally, somewhat to my surprise, the market comes into view which – in the author’s view – plays a major, however not exclusive, part in the realisation of the goods produced, in the allocation of resources and in the achievement of the proportionality conditions.

In the author’s (subjective) judgement, the previously listed criteria have the greatest role in influencing growth potential in a (i.e. in any) national economy. All these relevant criteria are discussed at four levels in the book. The first, the theoretical level, has already been mentioned. The second level of analysis is the theoretical impacts (and impact mechanisms) of economic policy exerted upon the relevant factors influencing the growth potential. This part (the second chapter of the book) still treats the possibility of the deliberate (economic policy) influencing of the potential at a general level.

The third level of examination consists in the evaluation of Hungary’s current features, likewise on the basis of the already adopted criteria. (This short – third – chapter reminds us most to the recently so fashionable SWOT-analysis.) Finally, the lengthiest and most thoroughly elaborated fourth chapter poses – in knowledge of the already discussed local features – the following question: what opportunities and means do the national economy have here and now to influence long-term growth capacity by applying the unchanged set of criteria adopted earlier. This chapter is the essence of the book – at least in my interpretation of the text – in which the author not only describes but also interprets, according to his own way of thinking and choice of values, the economic policy and/or reform debates of the day. (For this reason, I shall briefly return to this part further on.)…

The structure of the book as a whole – i.e. the first two chapters which still treat the issues non-country-specific, then the second two chapters which provide an evaluation directly relating to Hungary – leads to well-structured argumentation and a train of thought easy to follow – as already pointed out – always starting from the identical system of criteria. This effect is reinforced by the clear and closely reasoning style of academician Erdős.

Although a triviality, it perhaps deserves to be emphasised that Erdős does not intend to formulate a new reform programme or a new economic policy strategy. The menus have already been prepared, and they do not differ much. (See, first of all, Lajos Bokros’s collection of theses titled “Competition and Solidarity” published back in 2004 in the supplement of the weekly Élet és Irodalom (Life and Literature)3. Tibor Erdős regards Bokros’s paper as a point of departure, or as he puts it, he can even identify himself with it. But as far as its message is concerned, it is very similar to Double Bind, the book written by István Csillag – Péter Mihályi 4, or to the Government’s Convergence Programme. As regards Tibor Erdős, he clearly and inevitably commits himself to a drastic or, we may even say, forced expenditure cutting fiscal policy, to the radical reduction of the tax burden, to the soonest introduction of the single-rate tax, to the decrease of the social security contribution motivated by competitiveness and to the increase of the relative weight of taxes tied to consumption. (For the latter taxes do not have a direct impact on price- and cost-based competitiveness.) Similarly, first of all, the tax system and partly monetary and price policies and the interest margin regulated by the competition between banks can have a part in achieving the other important target, the increase of savings.

Academician Erdős is strongly in favour of even the forced implementation of the above outlined goals. However, he warns us, and
rather emphatically at that, to exercise caution in one specific subject-area: we have to be especially prudent about introducing a general reduction of the tax rate or alternatively introducing a single-rate tax regime which also produces a radical tax reduction, something that is unfortunately in Hungary often referred to bombastically as a “tax revolution” which precedes in time the measures aimed at budgetary expenditure cuts. Erdős shares the view that we cannot build on mechanisms that refer to the fact that a tax cut “skilfully” selected at appropriate points and overstepping the stakeholders’ (whether entrepreneurs or employees or perhaps consumers) threshold of response will within a very short time produce its own financial cover either by increasing the output or by improving the readiness to pay tax or possibly by reducing the grey and black economy. (This question is essential because the illusory success of the Slovakian tax miracle or the simplified enterprise tax once applied in Hungary relied exactly on such over-dimensioned impact mechanisms.)

On the other hand, Tibor Erdős’s book is not about inventing an “optimal economic policy mixture”. We – the author and the readers alike – know that there is no such thing as the “best” economic policy. A dominant part of decisions or suggestions is a matter of choosing values. What is more, the very decisions connected with the choice of values are the ones that distinguish economic policy. (Such question – in fact, a choice of value – is the lower tax level with social benefits granted exclusively to the needy, or higher tax level with a social support system extending to a wider range of people, and a decision of the same nature is the type of family support. But, to be honest, apart from the questions of scale and magnitude, almost all choices of greater significance fall within this latter category.) Even if not explicitly, but this question is present in academician Erdős’s reasoning. Although long-term growth (capacity) is indeed a question of paramount importance (I daresay, perhaps the most important question), but economic policy has to reckon with such correlations as fairness and even the maintenance of short-term stability, which correlations represent a constraint, a real (inescapable) constraint, in terms of growth potential. The estimation of mutually limiting decision criteria is eventually also a choice of value. (I myself am in sympathy with the choice of values that appears in the author’s writing in recent times. It is to be noticed, however, that, for instance, the Nobel laureate J. Stiglitz takes a totally different view on the function of economic policy, and he is by no means alone with his view.)

The initial question raised by the book dwelling upon the relationship of growth capacity and economic policy is roughly the following: what can be required from – or, if you like, what constraints can be imposed on – the decisions shaping economic policy from the aspect of improving growth potential. The way I interpret it, the strategic direction of economic policy is, on the one hand, completely independent of (yet not necessarily contradictory to!) the intentions of the parties involved in decision-making or in the preparation of decision-making, but on the other, it is after all formulated as a result of negotiations between economic groups or professional bodies which represent various interests. These negotiations should be conducted within the framework of such rules (constraints) – on “rule based” foundations as György Kopits puts it – that diminish at least the chances of gross mistakes. By translating it to the language of economic decision-making (to the practical language), in Tibor Erdős’s view, the starting point is that economic policy opportunities (strategies) that presumably weaken growth potential should be excluded from the options. (To avoid any misunderstandings, or rather misconstruction, the author strongly emphasizes several times that,
on the one hand, growth potential is not exclusively the consequence of government decisions. On the other, reinforcing the conditions of potential growth is not the only objective of economic policy – it is also aimed at fairness – but it is undoubtedly the most important criterion of the mass of still acceptable decisions.

The second chapter of the book tries to rake together the non-country-specific criteria that should be taken into account seriously by economic policy if it does not want to exhaust its own future additional resources. The study mentions as a priority – presumably in order of importance – the encouragement of technological development and the increasing public incentive for research expenditures (including within them the state support of corporate research). Determined by the opportunities offered by technological advance and by the absorption capacity of the economy, the priorities also include that first of all the willingness to invest should be strengthened by tax policy means (profit tax, investment tax credit, etc.), and then as an indirect factor by the predictability of economic policy and its ability to guarantee stability. The next priority is the savings incentive. (In addition to the well-known instruments of tax policy, such as tax benefits and tax credits, general government savings – i.e. not only public expenditure cuts, in general, but the reduction of the state's consumption expenditures, in particular – can play a key role in savings incentives.)

It is followed by an economic policy geared at facilitating efficiency, a subject not quite tangible, a topic that contains very diverse factors, everything from the efficiency of allocation (not to be mistaken for the capital intensiveness of production), from capital efficiency to deadweight loss, from competitiveness to restructuring or to the change in the tax structure. (In this heterogenous group of factors, the impacts beyond efficiency improvement generated by technological development, the impacts of the micro-level rationality adopted in cost management and of performance motivation noticeable to some extent in the whole system manifest themselves. All of the above have an important yet secondary role in relation to technological development.) Industrial policy is at the end of the line which is the remainder coefficient, the noise, in the language of econometrics. In this division of roles, the market must ensure that the fundamental proportionality conditions – wages, productivity, etc. – are met. From the aspect of economic policy, it means the degree of liberalisation, the segmentation of the market and the opening up of new competitive markets within the domain of network-based services.

The main point in this train of thought is the logical chain which starts with innovation and attempts to show that everything else derives from there. Financeability is an inseparable part of this chain in contradiction to traditional growth patterns which concentrate on real factors (which can even be described without money).

The longest as well as the most weighty and informative chapter of the book contains the critical issues of present-day economic policy and, on top of the proposals that seem to be mature, it also tackles “ambitious” professional ideas and the already noticeable risks ahead of economic policy. The fourth chapter, which overviews the Hungarian economic policy dilemmas of our time, aims to prove (at most times successfully), among others, that the planned changes, most of which can presumably be carried out within a couple of years, or at least their determining elements are a coherent part of a logical system. (For that matter, the presentation of the current general government reforms – health, pension, education, public administration and government reforms – targeted at reducing expenditures are designed to demonstrate the above-mentioned coherence.)
Contrary to the first two chapters of the book, the emphasis fundamentally changes in the section exploring the economic policy in the post-millenary period. Prominence is given to the rapid stabilisation of the economy, even at the price of substantial social (growth) sacrifices. It is also unavoidable to restore the recently broken credibility of economic policy, which will also require a growth sacrifice in the short run and, even if only for a few months, will bring about an inflationary wave. (The earlier low inflation rate is attributable to state subsidies, namely, to increased budget deficit, and if you like, to suppressed inflation. Their elimination, which has become indispensable by now, led to the growth sacrifice which society has to cope with and to a very short spell of inflationary wave without inducing the weakening of the forint. (Since the primary function of monetary policy is to dampen short-term fluctuations and vibrations and to reinforce the credibility and predictability of economic policy, it is hardly a coincidence that it represents a key issue of the strategy after the millennium, an issue treated as a secondary in the “theoretical” chapters (which are not hinged to national economies or time or any specific conditions). I venture to say: the order of importance shifts at this point. Restoring credibility and stabilising the economy in a forced manner is a precondition of all other strategic decisions, including the increase of the financial funds of innovation and the encouragement of corporate R & D investments.

This chapter addressing the current economic policy provides not only a general but also a thoroughly elaborated picture of the complicated, often contradictory, conditions and of the social, societal and political constraints that curb the decision-makers’ scope of freedom and characterise the existing practice of decision-making. These sources of conflict accompany government decisions built on one another across even such a rare period that can be considered ideal and when a strong reform compulsion is apparent, and thus these government decisions might ricochet.

Erdős gives a comprehensive and realistic picture of the economic policy dilemmas as well as the underlying theoretical considerations which do predominate in the background of seemingly chaotic details and, we trust, will eventually create harmony in the course of events. In this sense, his book stands pre-eminent among the innumerable papers published about topical programmes: his work is normative as opposed to János Kornai – often quoted by the author – who always endeavours to describe and explore the internal logic of the processes. At the same time, the requirements and norms Erdős lays down are not simple request shows, but they are based on economic regularities. And in the past decade and a half we were forced to learn the validity of these economic regularities at our own expense.

The author’s work unquestionable proves his initial assumption. It is possible and worth shaping the direction of economic policy strategy on the basis of macroeconomic theories and, within certain limitations, this intention can be realised in practice. I would add however that although the growth theories (and their general considerations related to tax policy) may assume the role of a compass, but they can by no means serve as a tourist map that would provide the grounds for reform decisions. When preparing decisions of a specific period and developing the reform programmes, we must start from a system of axioms, i.e. from the ideas of the so-called new political economy, that is more extensive than the abstract theory of macro-economy and that is capable of integrating several points of view.

Let us cite the copy editor of this book, László Csaba: “New political economy… means the approach in which the approach and the set of

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analysing tools based on mainstream paradigms are coupled with the analysis of institutions and Community decisions. It is not aimed at removing the foundations of the economy and replacing them with the paradigms of other disciplines. On the other hand, it is aimed at broadening the economic approach and supplementing it with political institutional factors.”

Tibor Erdős’s book – which can be a step forward to understanding the more profound features of the transformation process – now convinces me that we are heading somewhere in that direction.

László Antal


5 Stiglitz, J. (2005) The Roaring Nineties, Napvilág, Stiglitz, similarly to his previous, also hotly discussed book which addresses in details the problems of the Central European region (Globalization and its Discontents), Stiglitz argues violently against the standardised solution reflecting the general economic patterns favoured by international financial institutions (and, of course, the Washington Consensus). In his opinion, special attention must be paid to the cultural traditions of the given country. The especially important consideration of economic policy is to limit social shocks and to make the changes to be of human scale. He rejects radical solutions that require enormous social sacrifices in the short run even if they (theoretically) promote lasting growth in the long run. The former chief economist of the World Bank does not support solutions that originate from macroeconomic laws and can be applied non-country-specifically. (I myself am not in sympathy with Stiglitz’s conception, but it has to be considered as a conception characterising a relatively broad circle of experts.)

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